Management Services in Government

May 1976 Volume 31 Number 2

Management Services in Government

Incorporating the O & M Bulletin

May 1976 Volume 31 Number 2

Published by the Civil Service Department, Management Services, in collaboration with Departmental Management Services Officers. Correspondence and contributions should be addressed to The Editor, Management Services in Government, Civil Service Department, Whitehall, London SW1A 2AZ

ISSN : 0307-8558

New subscribers outside the Civil Service may place orders for a year's supply of the journal with the Editor; orders should be accompanied by a crossed cheque or postal order for £2, made payable to Her Majesty's Stationery Office. (Renewal of annual subscriptions is arranged by H.M.S.O.)

Offprints of articles and additional copies of supplements are available from the Editor. Orders from persons and organizations outside the Civil Service must be accompanied by a cheque or postal order, made payable to the Civil Service Department. The charge for copies is: offprints 4p per page; and supplements 16p per copy. Remittances should include an appropriate amount to cover postage. Subscribers may also purchase additional copies of the publication itself at a cost of 50p per copy, including postage.

It would be helpful if recipients could check that their copy is correctly addressed. If it is not, please send details of the correct address (including the postal code, where appropriate) to the Editor, quoting the reference number shown on the present address plate.

Contents

Page

60 The Use of Management Consultants in Government Departments
R. W. L. Wilding

70 How to Answer the Telephone and Make Friends
A. C. Hilliar

75 The Civil Service National Whitley Council Joint Committee on Management Services

77 Improving Management Systems

81 Peterhead Bay Harbour—An OR Study into Its Capacity for Tanker Traffic
W. Russell

88 Use of Microfilm in an Accounts Division
M. H. Woods

92 An Old Hand Welcomes the *Guide for New Managers*
Dr. E. N. Gladden

98 Developments in the Home Office Registry System

103 Machinery of Government—1975

107 Management Bookshelf
Mrs. B. M. Howard

110 Letters to the Editor

Supplement
Computer Installations for Government Departments

The Use of Management Consultants in Government Departments

R. W. L. WILDING, Civil Service Department

The following is the text of a talk given by Richard Wilding, formerly Under Secretary in charge of Management Services in the Civil Service Department, to the London Branch of the Institute of Management Consultants in December 1975. It is reproduced with the agreement of the Institute, who are making copies available to their members. —*Editor*.

I am going to talk about the business of advising Government Departments on their problems of management and organization. I realize, of course, that these subjects—the internal management and organization of Government bodies—are not the only ones on which consultants advise Government; there is other, more specialized work inside Departments and a whole range of work, sponsored by the National Economic Development Office and others, to advise Government about industry and other things in the private sector. But my own main concern is with internal management and organization, and I shall be addressing what I have to say mainly to them.

I had better start by establishing my credentials—and my lack of them. My job is to run the management services divisions of the Civil Service Department. This means that I am concerned with advising people about their management problems in two different ways. In the first place I run an outfit of about 100 staff whose main job is to give advice to other Government Departments. Secondly, another of our jobs is to be the central point of reference in Whitehall for the employment of management consultants from the private sector: that is to say, we look after the rules of the game for tendering and contracting and advise other Departments on the selection of consultancy firms for particular assignments. So, in addition to trying to do the job ourselves we gain some impressions of the way in which you do it. And it is worth adding that I also have on my staff at any one time a very small handful of individual consultants who join us for periods of up to a year, on secondment from their companies, to help us with some of our own assignments, though not, of course, to help us in the selection of companies for assignments which are put out to contract.

So, from the point of view of my job, I am quite well placed to comment on this business: as an individual, less so. I come from the ranks of the general administrators who move about in the Civil Service from

one kind of job to another. I have had no formal training in management sciences or management itself, and I had had no experience of taking part in management services or consultancy assignments until I was put in this job where I have to supervise them. So, if any of what I have to say seems to you to betray a lack of basic professional knowledge, you will know why.

I will expose my lack of professionalism straightaway by starting with a question: in this field of advising Government what *is* the professional's contribution? What is it that the adviser on management, whether he is an official in management services or a management consultant, has to offer? Unless it is a *distinctive* contribution, over and above what the people he advises can contribute for themselves, he is a charlatan. Where, precisely, does the distinctive nature of his contribution lie? Having brooded quite a lot on this question, I still find it difficult to answer. But I will offer you a one-sided and, I hope, provocative opinion.

The main part of the answer, at least where general management questions are concerned, does not seem to me to lie in depth of knowledge—by which I mean knowledge of the kind you can test in an examination—in the application of advanced theory or in thorough mastery of complicated technical systems. The tools of the trade are of the greatest importance, and may be pretty sophisticated in some specialist areas such as ADP or OR or management accounting. But in general questions of organization and management, what I have seen of them has persuaded me that it is the simplest tools that are the most efficacious. The more elaborate the management system or package, the smaller the likelihood that one can put it to practical use. Nor, in the three and half years I have been doing this job, have I seen much evidence to support the idea that advances in research into management lead to notable improvements in its practice. Perhaps I do the subject and its students an injustice. The time-scale in these matters is long. But it is only honest to record my impression that although the last ten years have seen an unprecedented amount of ink spilt on the subject of management, not much has been spilt productively, in the sense that it has actually helped the adviser on management to do a better job.

But if our best tools are our simpler ones and if deep and extensive knowledge of management theory does not help us very much, then it seems that the distinctive nature of the management adviser's contribution is not very like that of some other people who are called consultants, for example, the consultant physician or lawyer. This is not a learned profession. It seems to me a strength, not a weakness, of the consultancy business that it is not surrounded by a restrictive ring fence of qualification to practise. My personal hope is that it never will be. But in that case we have to pinpoint its truly distinctive contribution in some other way. I should like to suggest some elements in it, and to pick out those which seem to me to have a particular bearing on the ways in which the

contribution should be used: in particular how it can best be brought to bear on problems of management in Government Departments.

The first element is a simple and obvious one. You are well aware of it, but your potential clients sometimes overlook it: it is time. The consultant has time; he sells it. And there is no doubt that in this business it is a very valuable commodity. If you do not take time over a problem of management or organization, time to think about what are the relevant facts, to investigate them and to present the possible options fully and properly, the decisions are likely to be poor ones. Most of us spend most of our time, by necessity or habit of mind or both, concentrating upon questions of policy or immediate operations, and questions of management get squeezed in as a poor third. So the time of the consultant or of the management services officer is a necessary resource. I should have added, but for the current barrage of criticism against the Civil Service, it's a pity that yours is so expensive.

Another aspect of time seems to me important. It is not simply a question of the adviser's own time. If he is to do anything useful, he must engage the time of his client. For the manager himself has an essential contribution to make to the solution of his own problems. Indeed, one can put it higher than that. It is very nearly true to say that the job of the adviser is to help the manager solve them himself. But he can't do that unless he gives time to it. An important part of the adviser's contribution is, therefore, to act as a device for engaging the time of the manager.

A second element is experience. Some people absorb the lessons of experience very much faster than others; some people are apparently incapable of learning from it at all. But one cannot do without it. Speaking very broadly, I would say that the experience which is needed for dealing with a problem of management is of two kinds—and you need both. The first is experience of problems of the same type and of devising and trying out ways and means of dealing with those problems. The second is experience of organizations of the same type and of what is, and what is not, likely to work well in those organizations.

Within Government (I suspect it may not be quite the same outside) I have come to the view that problems fall into types more readily than organizations do, or—to put it another way—that an experienced and intelligent adviser can more easily recognize that problem A is essentially similar to problem B, and thus that one of the same family of solutions may be appropriate to it, than that organization C is essentially similar to organization D, and thus that what worked well in one can be expected to work well in the other. The reason for this may be that organizations are not only headed and staffed by different human beings who like working in different ways; each also has its own history (we tried that once and the memory is still too painful for us to try it again) and its own ethos (that would never go down with our chaps). Whatever the reason, I am in no doubt about the fact. And the

conclusion I draw from it is that when one is asked to advise an organization, one strand in the bundle of experience that should be brought to bear on its problem is experience not simply of the same type of organization but of that particular organization itself. To take my own field, you might be excused for supposing that all Government Departments are so much alike that what will work in one will automatically work in another. But you would be quite wrong; they differ enormously; you can almost smell the difference before the security man has written out your pass at the door. My own staff are civil servants, many of them with long service, and they come from all over the Civil Service. But when we are doing an assignment in a particular Department, we are liable to go badly astray unless we can mobilize direct experience of that Department. And this must apply all the more strongly to the consultant from the private sector.

But we often need to couple the insider's experience of his own organization with a fertilizing experience from outside. That outside experience commonly serves a double purpose. In the first place the outsider may simply be more familiar with the type of problem and possible ways of tackling it. As a professional adviser he has come across it many times before, while the inside manager may never have done so. Second, and a little more subtly, because he has seen the problem many times before, he may be better not only at tackling it, but at recognizing it in the first place: at sorting out the bones of the problem from the accidental and historical accretions which disguise its real nature from the man who has lived with it for a long time. We become so familiar with the discoloured patch on the ceiling that it may never occur to us that it is caused by a leaking tank in the attic. It is, perhaps, the main value of the independent and experienced eye that it will often see the symptom in what the insiders have seen as the problem itself.

Time and experience, then, are two elements. The third that has struck me as important—I am not attempting a comprehensive list—is a kind of imaginative intelligence. Several things go into this, but the biggest seems to me the ability to think oneself into the position of the manager one is trying to help. The help we can give him will be very limited unless we can share that particular view of the job and the organization which he has because he sits where he does. This seems to me the most valuable quality of all in a consultant, if only because it is the rarest. For it involves a very wide range of sympathy; the adviser has to shrink his horizon to the limited view of the junior manager and his staff, who are inferior to himself in ability, as well as expand it to that of the managing director or Permanent Secretary whose responsibilities are on a scale he himself has never experienced. If I were to pick out those consultants and those civil servants who have impressed me most in this field, it is those few who have really shown this quality.

There can, I think, be some conflict—it may be familiar to you—

between these two qualifications of experience and what I have called imaginative intelligence. As a man gets older, the first can squeeze out the second: to summon experience to one's aid costs less effort than exercising intelligence and imagination. Among older consultants I have most come to value those who can review their experience, find it irrelevant and throw it out of the window.

Imaginative intelligence, however, cannot do the job on its own. It has to be accompanied by a critical faculty which seems to me especially important in the early diagnostic stage of an assignment. By this I mean the ability to do three things. The first is to detect that the argument which is being put to you does not follow; the second is to spot that it does not accord with the facts; the third is to identify the underlying reasons why things do not work in the way they are supposed to. Partly this is a matter of experience. But, here again, I have met many experienced operators who lack this critical faculty. It can be summed up, perhaps, as the habit of not taking things at their face value; like imaginative intelligence, exercising it continuously is a strenuous business.

Finally, I must mention the ability to communicate—because time, experience, intelligence and the critical faculty are useless without it. If I may venture a criticism here, I think there is one aspect of communication which advisers on management, both civil servants and consultants, but especially consultants, have neglected. You are pretty good in face-to-face discussion. And oral presentation to a group is also one of your strengths: I have often admired the systematic and logical expositions which consultants have given us. You are also not bad at producing a well-structured summary of points on paper. But I think you neglect the art of writing for the purposes of exposition and persuasion. In my world, that art is a very important one. Paper is the medium through which we do our business. That may be a good thing or not. But it is a fact. The consultant or management services officer who cannot develop an argument in writing clearly, logically and, above all, persuasively can achieve very little.

One reason for this is that in Government a lot of people have to be consulted before decisions are taken, and this process takes time. We therefore need a fully argued report which can be circulated. And it will only be accepted if it then stands up to analysis and criticism by quite a number of able people who are used to criticizing other people's ideas and will dissect a consultant's report with no less relish than anyone else's—especially if it appears to threaten their own position. Consultants who have served with us have sometimes criticized their Civil Service colleagues for writing long and wordy reports—and there is justice in the criticism. And they have sometimes been appalled by the time we spend re-writing and polishing drafts. But that is not because we are all essayists who have missed our vocation. It is because the way in which the case is argued and presented on paper can be crucial in determining whether the report is followed by action.

This leads me to a number of practical points which seem to me to arise from the analysis I have attempted and from my experience over the last few years.

The first concerns the way we use the time available for an assignment. In general, outside consultants have a better sense than civil servants have of the value of time; you have an obvious incentive to put a high value on its opportunity-cost, while in your wearier moments you may think that if the Civil Service is like God in nothing else, at least a thousand ages in its sight are as an evening gone. But, although consultants are rightly anxious to get through the job and on to the next one, this carries with it the temptation to spend less time than one should on two things. One is the diagnosis, preliminary survey, call it what you will: I mean the period during which one makes sure both that one has really understood what the problem is and that one's understanding of it is the same as the client's. There is an equal responsibility on both sides here; on consultant and client alike. But more assignments go wrong, in my view, from not taking enough care about this than from any other single cause. Making sure of what the problem is includes making sure of what it is not, and so taking care not to devise elaborate cures to deal with non-diseases—or to put the patient on a kidney machine when all he has is a stomach-ache. This is especially important, of course, when the management adviser—whether from CSD or a consultancy—has a special kidney machine of his own, cunningly devised, lovingly perfected and differing in some small but crucial way from everybody else's.

The other thing which is worth spending time on is hawking your ideas round the people they are going to affect. There are various ways of doing this, but I have come to the conclusion that far the most effective is to pick your birds off one by one in a personal approach. As those of you who have worked in Government know, we usually set up a Steering Committee to supervise assignments; the various parts of the business are too closely interlocked and our methods of decision-taking too democratic to make it sensible for the advisers simply to report to a single individual. Even so, however, we have found that Steering Committees are not good places for negotiation. Previous briefing has hardened existing attitudes and one old woman alarms another. People have to be squared in advance and I know of no real substitute for going and talking to them one by one. It takes time, but it pays.

I recognize that there is a problem here. Preliminary diagnosis and hawking ideas around take time, time costs money and making proper provision for these things puts up the price you have to quote. Departments quite properly examine tenders with a view to getting a good job done as cheaply as possible. One can price oneself out of a contract. There is no easy answer to that one. All I can say from the centre is that we encourage Departments to look for value for money and not necessarily the cheapest quotation; and that a job which successfully

leads to action on agreed lines is more likely to make the company's future proposals attractive than anything else.

The second element in my analysis was experience, and here I want to say a word about mixed teams—the mixture of outside advisers, whether from CSD or from consultants, with the client Department's own staff. We have a predilection for doing this, and I think it is soundly based. Perhaps I may illustrate the point from our own programme of management reviews—a programme in which each major Department of State in turn mounts a review of its own management and organization with assistance from CSD. In mounting this programme, we took a deliberate decision to put the Department under review in the lead. Not only does its Permanent Secretary chair the Steering Committee—that's natural enough. But the reviewed Department also provides the leader of the review team which does the work and which is composed about 50/50 of CSD and departmental staff (the CSD element often includes a consultant on secondment to us). This arrangement may well strike you as an odd one. The CSD members of the team are experienced and increasingly expert in this work; the Department's staff much less so; and the team leader frequently has no experience of it at all, since Departments (in my view justifiably) frequently choose as leader the most able Under Secretary or Assistant Secretary who is available, whether he has experience of management services work or not. So the professional in this business—the senior CSD representative—does not lead the team; he is the leader's No. 2. The leading role is taken by the insider, who is personally known to and trusted by the top management of the Department, who knows the Department intimately, and who will still be there when the review is over. The risks inherent in this arrangement will be perfectly obvious to you and I need not elaborate on them. In practice, however—and we have now conducted six of these reviews and are in the middle of two more—we find that they can be dealt with. In particular, we find that it is feasible for CSD to get its way in the things that really matter about how the review should be conducted by adopting the Duke of Plaza-Toro's position. And the process is more acceptable, and the proposals carry more authority—indeed, I think are better in themselves—than they would be if we led from the front. Most important of all, action is much more likely to follow.

Now I am not saying that this precise arrangement would normally be suitable for an assignment let to an outside consultancy by the usual methods of tendering. That would depend upon the nature of the assignment, and there may be questions of professional and commercial responsibility for the end-product which are more acute in a contractual relationship than when one Government Department is helping another. One need not, perhaps, go as far as we have done in order to engage the time, the experience and, as a result, the commitment of the client. But I do want to suggest to you that the success of an assignment may well depend upon going as far as one possibly can in that

direction—even to the point of deliberately choosing to take, as it were, a minority position in the venture. And I think that general point holds good not only in assignments concerned with high-level matters of management and organization, but also at lower levels, and in specialist assignments as well. Constructing an operational research model is a technical business. But it will only be sound, and certainly it will only be used, if the decision-makers for whom it is constructed are deeply involved in the process and feel certain at the end that the relationships it embodies are those which they themselves think to be real and important.

My third element is what I have called imaginative intelligence. This is not just sensitivity to atmosphere and climate, though it includes it. It is also the ability to jump over the intellectual gap which always separates the adviser from the advised, the gap that arises from the fact that what matters to me is not the same as what matters to him. On the face of it, you would expect this to be a matter in which the Civil Service management services officer has a pronounced advantage over the outside consultant, and the consultant who has worked in Government before over the consultant who has not. As between two people who are equally endowed with imaginative intelligence, that is true. But I have formed the impression that the quality is more important than the experience; and that the same is true of the critical faculty I have also mentioned. The emphasis varies with the nature of the assignment. But, in general, if I have to select a consultant, either for an assignment or for a period of secondment to my staff, I will usually choose the person who seems to show imaginative intelligence and a good critical faculty but has never worked in Government in preference to the person who lacks these qualities but has lots of Government experience. If I can have both, of course, I will accept them with cries of joy.

It follows partly from the importance we attach to these personal qualities that we advise Departments who are selecting consultants always to insist upon seeing the individuals who would actually undertake the assignment before they make their choice. In saying this, I do not mean at all to depreciate the value of a company's collective experience, back-up facilities and supervisory wisdom. These are important and must always be taken into account. But we have learnt from experience that it is simply not true that anybody whom company X, if selected, decides to entrust with an assignment will do an equally good job. The personal qualities of the individual consultant and the match between him and the people he will have to deal with always matter, and may often be crucial.

I know from experience that a good number of management consultants have these precious qualities. The fact that they are not all that common in the working population at large, that you have a high concentration of them and that you work hard to develop them and the ways in which they can be applied to management problems, seems to me the most important reason why we shall continue to need your

help. Equally, however, we shall not have much need for people without them. That represents a bit of a change; and the reason for it is that over the last six or seven years the Civil Service has made quite a big advance in developing its own management services work. We now employ more MS staff in Departments, we have learnt a lot of the techniques and developed some of our own, we have greatly improved our MS training and we have raised the sights of the O & M man so that he can operate effectively at higher levels. So that to the extent that you are in competition for Government business with the Government's own staff, that competition is now, I believe, tougher than it used to be.

My last element was communication. I have mentioned writing, and needn't say any more about that. But may I also, with genuine humility, offer two bits of advice? The first is, whatever else you do, don't talk down to your client. Sometimes you do. I praised your oral presentations earlier, and meant it. But I have sat through some which made me hot with suppressed irritation. One would sometimes suppose that civil servants were assumed never to have heard of an operating account or an algorithm. The main difficulty, I think, is that reducing things to their simplest terms—in itself a very desirable thing—carries the risk that the audience will think you regard them as simpletons. I have been over-simplifying this evening, and you may want to throw this tomato back at me. That's perfectly fair. But the point's still valid. People are prickly in their attitude to those who presume to advise them about how to run their business—consultant and management services man alike. And in the Civil Service there is nothing that makes the quills on the porcupine bristle harder than talking-down. Or, rather, there is only one other thing.

That other thing is jargon. I can say this more cheerfully because we are quite as bad about it as you are—sometimes worse, because we can mix Civil Service jargon with management jargon to horrible effect. Of course, every walk of life has some need for its own jargon—to denote precisely concepts or classifications which ordinary language does not provide for with enough discrimination. In the business of management, however, the truth is that we need it rather less than most, but use it rather more. And I have to tell you that the Civil Service, which revels in its own jargon, has most unjustly and unfairly come to regard the jargon of management with something approaching full-blooded hatred. The Head of the Civil Service refers to it as mid-Atlantic Cherokee.

There is one other point I must mention—the importance of consultation and co-operation with Civil Service unions. This is in no way unique to the Civil Service; you must come across it everywhere. But I must emphasize it because it is crucial. Our unions do not like Departments to employ consultants. This is partly for the straightforward reason that if we did everything we needed for ourselves, there would be more jobs for union members; and partly because some insensitive

handling of earlier assignments, for example, in the field of clerical work measurement, and also of management by objectives, left a sour taste in the mouth. We take a different view from theirs. It would not be sensible to man the Civil Service to meet every conceivable and temporary need; more positively, there are times when we need the experience of outsiders; moreover it is most necessary that we should from time to time check our own standards by observing yours at close quarters. But we can only secure the co-operation of unions and individual members of the staff alike if our consultants take care to bring to bear a number of the features I have talked about this evening: time to listen to what they have to say; imaginative intelligence to do so sympathetically; the critical faculty needed to sort out the real trouble from the stated one; above all, good communications. We now have to consult our staff and unions at all stages of an assignment: not only about the outcome but about the project itself and how it is to be conducted. And the consultants we employ must be seen to attach as much importance to this as we do ourselves.

Let me say in conclusion that I am very much aware that I am talking to you at a time when the level of Government business for consultants is pretty low. Part of the reason for this is the way in which Government Departments have been developing their own management services skills; a more important part is a state of financial stringency in which we must cut public expenditure wherever it is possible to do so. It would not be sensible for me today to attempt any prediction about how soon it will be possible for business to pick up again. But I am convinced that private sector consultants still have a lot to offer us. We shall need your time. We shall need the fertilizing experience you can bring of problems which are similar to ours in other fields. I have suggested that the competition is now tougher and the quality we shall need in the individual consultant will be high. And both sides should, I think, pay attention to the best methods of combining your experience with that of the civil servants you advise and to improving our communications to ensure full and clear mutual understanding from the beginning of each assignment to its end. Provided that we can do all these things I feel sure that there is a good future for our working well together in the public interest.

How to Answer the Telephone and Make Friends

(or how a gamble on a psychological approach came off)

A. C. HILLIAR, Department of the Environment

Arthur Hilliar is Head of Driver Enquiry Unit at the Driver and Vehicle Licensing Centre, Swansea. —*Editor.*

'Good morning, Driver Enquiry Unit, can I help you?' 'Hello, Drivers Enquiries, can I help you?' . . . Some of you may have heard these phrases, or phrases like them, in a recent edition of Panorama on BBC Television. They were used in the programme run recently about the Driver and Vehicle Licensing Centre at Swansea.

The setting was the Telephone Section of the Driver Enquiry Unit at the Centre where calls from the public are received at an average rate of 1,600 a day, peaking to over 2,000 a day from time to time. It is big business and has to be handled with efficiency and dispatch if major criticisms are to be avoided. If these numbers of telephone calls seem large, remember that the Centre is dealing with up to 70,000 applications for driving licences alone every day at present and that this figure is constantly increasing.

The problem of dealing with telephone enquiries from the public has been with us ever since the Centre 'went live' with the issue of driving licences in March 1973. The new centralized system for the issue of licences was bedevilled by teething troubles and by industrial strife which resulted in strike action across the whole of the Civil Service in the spring of that year. Even without these difficulties, the centralization of driver licensing records and the issue of licences from Swansea instead of across the counter at local offices was certain to provide a less speedy service to the public than that to which they had previously been accustomed. Arrangements had been made to provide an Enquiry Unit to deal with questions from the public but, in the planning stages, it was not anticipated there would be a great volume of enquiries nor that many of these enquiries would be related to licence issues. However, right from the outset a large number of enquiries were received from the public—many of them by telephone.

For many reasons which, with hindsight, might have been avoided (and which have since been resolved) the system itself failed to provide

an easy way of obtaining information to deal with these enquiries. Added to this, many of the staff were new recruits, in an area with no background of Civil Service-type work, and had so little knowledge—and, of course, no similar experience—that dealing with the enquiries became a major problem. Inevitably, the problems snowballed, and public irritation with the Centre as a whole and with the Enquiry Unit in particular was generated. The problems were made worse by the fact that, because of the underestimation of the likely volume of enquiries, insufficient Post Office lines had been provided and by the fact that the 10 lines which were available terminated in 'Key and Lamp' units. The Key and Lamp arrangement is adequate for dealing with low to medium volume traffic, especially where it is only necessary to take a message and have someone else sort out the problem. Unfortunately, the public became so demanding on the telephone that they were not prepared to accept a promise that a case would be looked at and a reply sent later. So, more and more, the staff who were taking the telephone calls were forced to try and discover the position in regard to a case and undertake personally to call back to the enquirer with the answer. To do this often meant that the staff answering the telephone had to leave their answering position to try and get information. This meant that an answering position was unmanned and that calls on certain lines were not being dealt with. This, of course, generated still more public anger and frustration, and inevitably this affected staff morale. Consequently, staff felt unable to cope with telephone work on a full-time basis and arrangements were made to give them a break by alternating their time between taking telephone calls and dealing with similar enquiries received by correspondence. But this led to still more difficulties since it reduced the sense of commitment to their specific responsibilities.

Something had to be done. So, towards the end of 1973, we took a long hard look at the situation: what were we trying to do, what staff and equipment did we need to do it and what methods would best meet our needs?

Our prime objective was easy to state—to deal with enquiries and complaints speedily and effectively. But that objective had also to include consideration of the presentation of the 'public face' of the Centre.

On equipment, arrangements had already been made to replace the Key and Lamp system with a commercially produced and highly sophisticated piece of equipment called the Automatic Call Distribution System which would, of itself, solve many of our problems. But this equipment was still being manufactured and could not be installed and made available until the middle of 1974. As a short-term measure we could double the number of incoming Post Office lines although these would have to terminate in ordinary hand sets since no further supply of Key and Lamp units was available. On staffing, we considered that 28 staff would be needed to man the 20 lines, thus allowing both for

absences and a small number of people to 'float' into positions which were temporarily unmanned.

So we did all these things. But our approach to method entailed far more complexities. First, we had to decide whether our staff (Clerical Officers) were to be caseworkers or simply message takers. Second, we had to find a way of overcoming complaints that promises to call back to an enquirer were not being kept. Third, we had to consider how to maintain staff morale in the difficult situation of being sandwiched between an often irate public and the rather rigid operation of the system. Finally, we had to find ways of motivating staff to provide maximum efficiency. And all these things had to fit with our primary objective. Again, the objectives were easy to identify—the problem was how to achieve them.

We decided that the real answer to our problem lay in closer contact by our staff with their clients. By making staff responsible for the casework arising from each call, involvement (and job interest too) would be greatly increased. So we came to the quite radical decision that individual COs should give their names to the public at the end of each call so that the enquirer clearly knew to whom he had been speaking. It was a psychological gamble to try to resolve all our problems.

The gains which would result from this move could, we thought, be forecast. A link would be established with frustrated members of the public; it would obviate the danger of a customer not being called back; it would also provide a reliable method of tracing who had dealt with a particular enquiry and it might help to establish a personal relationship with the enquirer and thus take some of the 'sting' out of the calls being received.

But we are a Civil Service office and, by long and hallowed tradition, civil servants remain anonymous and telephone calls are answered on that basis—the only information given being the name of the section.

We decided to try the change. To set it up we took the staff into our confidence. We told them that the going might be rough, and that they might be the target of abuse. Conversely, we offered them what we saw as an opportunity of becoming the most important 'front line troops' for the Centre, the prospect of an interesting and challenging job which would stretch their talents to the full, and the chance to learn something about, and to practise, good public relations. The staff responded magnificently to this offer—strangely enough very few of them decided that they did not want to go through with it. So we asked them to introduce themselves in the way described at the beginning of this article. We asked them to be sure to take all necessary details to enable them to track down the case with which they were dealing. We also provided them with a pre-printed form to assist in this, which they were required to sign and date; and, above all, we asked them to be sure to give their name clearly at the end of each call.

And what of the results?

We now have our new sophisticated telephone equipment and, with

it, 24 answering positions connected to 30 incoming lines (which allows some flexibility for people who cannot receive an immediate answer to be held temporarily until an answering location is free). We have provided ourselves with an additional outgoing telephone facility of 12 lines to enable the staff to make outgoing calls without interfering with the incoming traffic. We have increased our staff to 42 to deal with the increasing volumes of work received. And, with these facilities, we are now able to handle, with reasonable efficiency, over 2,000 incoming calls per day, cope with the casework arising from those calls, and call back to our clients whenever necessary. All this compares with our ability to handle less than 1,000 calls per day previously.

We have been delighted to find that, in these fields, our forecasting proved accurate. But our ultimate gain has proved far more rewarding than we could ever have envisaged when we started.

What have these additional gains been? First, the response from the public to the fact that our staff give their names has been most gratifying. Because of the way in which the licensing system is set up, answers to most of our enquiries take 48 hours or so to obtain. So we are faced with the situation where we must try and make the caller feel a little happier at the end of his first enquiry than he was when he began. We find that our approach now makes him feel that we are just as concerned about his problem as he is. Giving a name gives the enquirer a point of contact—a feeling that, if the worst comes to the worst, he has now at least obtained a life-line which he can grasp and tug to produce the desired results. Second, the response from the staff has been equally good. By giving their names they have involved themselves and committed themselves completely. They like this feeling of commitment and the challenge it presents to them to resolve the difficulties. Third, the job interest for the staff has been tremendously increased by the knowledge that the problem is entirely theirs to resolve. They know that their managers will assist and back them, but that the ultimate and direct responsibility to the enquirer is theirs and no-one else's.

The results of these changes and this approach has been to enable us to increase our output beyond all expectations. It has provided an eminently satisfying customer relationship—satisfying to both parties. It has produced several hundred 'thank-you' letters, many of them effusive in their praise. To illustrate the public response which we have gained it might, perhaps, be interesting to offer a few quotations from some of those letters:

> 'It is quite amazing to think that, amongst the accepted idea (quite wrongly it's proved!) of red tape, rigid procedures and systems, computers and disinterested civil servants of Government Departments, there is, at Swansea, a real human being.'

> 'Thank you so much for your helpfulness and courtesy . . . if you are ever Bristol way with time to kill, please contact me. You sounded so very nice on the phone.'

'I would like to say how very impressed I was by the courtesy and efficiency with which you handled my problem. One has experienced so much incompetence in some Government Departments in latter years but it was most refreshing to encounter such helpful and human co-operation.'

'I must drop you a line of thanks for your prompt handling of my telephone request for assistance following the loss of my driving licence' (this from an MP after speaking to a Clerical Officer).

'May I refer to our telephone conversation this morning: I am most grateful to you for the courteous assistance you gave me today. With all the pressure of present day life it is increasingly rare to find someone in a large establishment such as yours who is prepared to take the trouble that you have.'

'She was not only prompt and efficient in dealing with my problem (which I have found unusual when dealing with governmental channels) but she was also always pleasant and helpful. I would imagine she handled dozens of people like myself, but her pleasant and efficient manner made me feel I was the only problem she had to deal with' (from an American citizen in a letter of thanks addressed to the Director).

'It was so nice to have contact with someone who was prepared to give individual and personal help instead of coming up against impersonal, complicated and frustrating bureaucracy."

All these letters have been addressed individually to officers answering the telephone as a result of giving their own names. The staff have also received, at various times from satisfied customers, three bouquets of flowers, a single boxed red rose, a box of chocolates, a handkerchief, and various small monetary gifts and gift vouchers. We have, of course, returned all the monetary and near monetary gifts but there is no doubt that the letters of thanks (and the occasional gift) does much to lift the morale of the staff who are basically very hard pressed and have to undertake a very testing task.

There are, of course, abuses and failures. This system is sometimes abused by the enquirer who, having obtained an officer's name, will ring that officer every day or sometimes twice a day in an impatient and unhelpful manner. There have been failures because, in a telephone conversation, the enquirer sometimes hears words which he wants to hear rather than the words which are actually said to him. But no system can be perfect in a situation like this and, while it may not necessarily be true in every Civil Service situation, there is no doubt in our minds that, *for us*, our approach, our commitment and, above all, our willingness to identify ourselves as individuals, works and satisfies the customer who pays our wages through his licence fees.

The Civil Service National Whitley Council Joint Committee on Management Services

Management Services work has greatly increased in scope and variety in recent years and can now cover anything between a few hours' time spent examining a particular way of doing a small job and several months spent in reviewing the major aspects of the work of a large Department. It can, therefore, have major consequences for large numbers of staff and it was a natural development when, in early 1972, the Staff Side of the Civil Service National Whitley Council set up their own Committee to keep an eye on developments in this field. One of the first invitations to Richard Wilding on his appointment as Under Secretary in charge of the Management Services group of divisions in CSD in May 1972 was to make a presentation of the work of his divisions to the new Staff Side Committee, and this he readily agreed to do.

At this first presentation, which took place in October 1972, the Heads of the four Management Services divisions gave expositions of their work and answered questions. The presentation, essentially an informal one, led to a useful discussion with the representatives of the 11 trade unions who attended with the Secretary of the National Staff Side and, on the same informal basis, similar presentations were made in June 1973, March 1974 and October 1974.

The June 1973 presentation covered among other things the changes which had recently taken place in the organization of the CSD's Management Services divisions, and recent developments in Management by Objectives and Specialist Subjects; in March 1974, there was a general survey of Management Services work at that time.

At the October 1974 meeting, which featured an explanation by Customs and Excise staff of their resource allocation study, the Staff Side representatives suggested that the meetings, or presentations, should be replaced in future by a formal Joint Committee on Management Services. This would be in line with similar arrangements which already existed for Welfare, Superannuation, Accommodation and Training (a similar Committee has since been set up to cover relationships with the Central Computer Agency also). There was agreement between the two Sides that a formal Committee to which both would have a right of access would make it easier to deal with specific problems and the Civil Service National Whitley Council Joint Committee on Management Services was, therefore, duly set up.

At its first meeting the Committee adopted the following terms of reference:

> To be a forum for the discussion between representatives of the Official and Staff Sides of the Civil Service National Whitley Council of such matters of interest to either side as lie within the purview of the Civil Service Department's group of Management Services divisions.

It was agreed from the start that the membership of the Committee should not consist of named individuals, but would vary in accordance with the agenda. This was seen as an advantage by both sides. The Official Side wished to be free to call in appropriate departmental experts where this would help; and the Staff Side recognized that some issues would be of greater interest to some of their members than others.

The matters of main concern to the Committee, and on which something akin to formal negotiations have taken place, have been the extent of staff consultation before and during Management Reviews of Departments, and the disquiet felt by some staff about the way certain management improvement schemes were introduced or have developed. On Management Reviews, the outcome was the preparation by the Committee of an agreed statement, promulgated by the Civil Service Department and bearing the authority of the National Whitley Council, in which Departments are encouraged to engage in widespread and open consultation with their Staff Sides at all relevant stages of the review. On management improvement schemes, a joint statement has also recently been issued. The statement is reproduced in full at page 77 of this edition of *MSIG*.

The Committee has, therefore, proved to be not only an outlet for Staff Side interest in MS matters, but also an accepted meeting point for discussions leading to agreed solutions. As such it is a development which is welcomed by the Official Side no less than by the Staff Side. Both sides are satisfied with the way the Committee is working so far, and are confident that it has a very useful part to play in the future.

Improving Management Systems

Joint statement

1. This statement has been agreed jointly by the Official and Staff Sides of the National Whitley Council Joint Committee on Management Services.

Definition and origin

2. Over the past 10 years many departments have launched projects and programmes of varying size and scope in order to improve the systems and processes of management within specific parts of their organizations. Many of these projects have been called 'Management by Objectives' (MbO) and have adhered more or less closely to the main features of the management system (more accurately, family of systems) that goes by that name. They have produced some useful results but both sides agree that the time has come to take stock and examine the drawbacks and the scope for improvement in this general area of systematic approaches to better management.

3. Departments report that MbO has in some respects proved over-elaborate and costly to install. Staff Sides have found in some cases over-zealous or insensitive settings of 'targets' or ways of reviewing and recording performance which have in their view produced unfair pressure on individuals. Official and Staff Sides alike think that there have been some defects in the participative aspects of MbO primarily in respect of consultation with, and the involvement of, more junior staff. So it is now necessary, in the light of experience, to devise new guide-lines which may be helpful to the development of improved management systems in future.

4. Improving management systems is a very general expression; indeed it is a continuous responsibility of management to keep systems under review. We use it in this statement to cover the more systematic and comprehensive approach whereby the management team of an organizational unit, normally with experienced help, sets out to improve its management by fostering a common understanding of the purposes the unit exists to serve, by clarifying responsibilities and by developing a system for the agreeing of objectives and monitoring progress.

Basic principles

5. Some basic principles are:

(i) Before new management arrangements within the scope of this statement are introduced, management should consult and seek

the agreement of the Staff Side. To aid the consultative process, the Staff Side should be supplied with any documentation prepared outlining the reasoning behind the introduction of the new arrangements.

(ii) Managers and staff should be involved as fully and freely as is practicable before decisions are taken which affect them and their work, with the aim of achieving a corporate sense of purpose and working as a team.

(iii) At all levels of an organization there should be a clear idea of the aims and purposes which it exists to carry out, and the programme of work should be related to them.

(iv) Aims and purposes change over time, as do the best ways of fulfilling them, and organizations need to be run in a way which is open, adaptable and receptive to innovation and change. This is more relevant today than it has ever been before.

(v) Managers and staff should know what is expected of them and what they are responsible for achieving.

(vi) There should be appropriate and systematic procedures for planning and control which should reflect the nature of the task.

6. These principles are an accepted part of thinking about management in the Civil Service. They are an important ingredient in central and departmental management training and underlie a number of recent developments in personnel management. The problem is how to give effect to those principles by improving management systems in ways which are both effective in practice and acceptable to the staff involved.

7. In the view of the Official and Staff Sides, the emphasis should not be on the application of a formal 'package' but on the development by management and staff, working together, of a system of management tailored to the particular needs of each organization and of the people in it.

The initiation of improvements

8. It follows that there will be wide variations in method and approach. The nature of the job differs; so do departmental practice and processes of consultation. In seeking to improve the management practices which are the subject of this statement, we recommend the following guidelines:

(i) It should be open to Official and Staff Sides alike, through normal Whitley or any other consultative machinery, to propose organizational units in which improvements would be feasible and worth while. At all stages the Staff Side should be provided with the appropriate documentation.

(ii) The first step should be consultation between the two sides about the desirability of proceeding further. The second should be a preliminary survey on which departments should seek to proceed

on a basis agreed by the relevant Departmental Whitley Committee. Experienced help and advice will usually be needed. It may be obtained from a departmental Management Services Unit, Management Services in the Civil Service Department or, subject to the terms of the CSD's Code of Practice, outside consultants. It should culminate in a draft plan. The plan should be compatible with related developments already in progress or planned for the future, and should include:

(*a*) Aims.
(*b*) An outline programme of developmental activities.
(*c*) A statement of additional resources needed and their sources.
(*d*) The means proposed for managing the programme (where desirable on a joint basis).
(*e*) The arrangements proposed for consultation with the Staff Side as the programme proceeds.

(iii) The agreement of the relevant Departmental Whitley Committee (DWC) should be sought before the plan is settled, and any modifications acceptable to both sides should be incorporated in it. The agreement of the two sides (which may be reached either by formal or by informal agreement as may be desired) and their joint support for the plan, should be made known to the staff on an agreed basis.

(iv) Every effort should be made to encourage the full and effective participation of staff at all levels at all stages.

(v) As the work proceeds, there should be regular joint reviews of progress (again formally or informally as may be desired). Both Official and Staff Sides should ensure that difficulties are identified and discussed as soon as they arise with the aim of reaching agreement on how they should be overcome.

Planning and control systems

9. Any ongoing system of planning and control which emerges should be consistent with the following principles:

(i) Any effective management system incorporates procedures for determining what it is hoped to achieve, by when and with what resources. While every manager must, of course, satisfy himself that each member of his staff is making an effective contribution, improved management systems as such should not be designed or used for putting pressure on individual members of staff. Their object is to make sure that effort is directed in the best possible way.

(ii) Special efforts should be made to enable the managers and staff directly affected to contribute to the development of forward plans and of criteria against which results would be assessed.

(iii) A sound management information system is required to facilitate effective planning and control. It may be necessary to begin

collecting data from members of the staff. But for most planning and control purposes it is more useful to aggregate the data so that attention is directed to the performance of groups of staff rather than of individuals. This will, of course, be more favourable to the growth of a team spirit and the effective involvement of junior staff. Agreement should be sought within the machinery of the local and/or DWC on what data are to be collected and in what manner.

(iv) Departments will need to collect data in different ways depending on the nature of their operations. Data should not, however, be used to draw up league tables implying merit or criticism regardless of special circumstances which might apply. Statistics alone can never give the whole story.

(v) Consultation on the lines described in paragraph 8(v) above should be a continuing feature of the system.

Recommendation

10. We recommend that the proposals in this joint statement should form the basis on which approaches to improving management arrangements should be developed in future. If full account is to be taken of the approach described in this statement, systems which have already been introduced under the name 'Management by Objectives' must, on the initiative of either side of the DWC, be reviewed. The method of carrying out any review is a matter for discussion in the appropriate DWC in the light of the prevailing circumstances.

Future developments

11. The Management Services (General) Division of CSD has undertaken a programme of study and experiment in the broader and more flexible approach described above. The application of this approach will be kept under review and discussed by the Joint Committee on Management Services. The results will be reported to Departments and Staff Sides as appropriate.

Peterhead Bay Harbour

An OR Study into Its Capacity for Tanker Traffic

W. RUSSELL, Civil Service Department

Willy Russell is a Principal Scientific Officer in the Management Services (Operational Research) Division, CSD. He would like to thank staff of Transport Division, Scottish Economic Planning Department, for the help they provided in preparing the article that follows. —*Editor.*

Introduction

Peterhead, in the north-east of Scotland, has since the latter part of the nineteenth century been the site of a prison mainly for offenders who have been convicted of serious crimes and are serving long sentences. The site for the prison was chosen with the purpose of providing a worth-while activity for the prisoners. The task given them was to construct two breakwaters across the mouth of the nearby Peterhead Bay to form a harbour of refuge, using granite quarried locally by the prisoners. The breakwaters, the second of which was only completed in the 1950s, have enhanced the refuge capability of the Bay, but the harbour was not much used until the mid-1960s. However, within the last ten years the inshore fishing fleet has moved from Aberdeen to Peterhead fishery harbour which opens on to the Bay and the Bay Harbour has become ripe for development for oil service and oil development industries. The Secretary of State for Scotland is the Harbour Authority for the increasingly important Peterhead Bay Harbour and discharges this responsibility through Transport Division of the Scottish Economic Planning Department (SEPD).

The North of Scotland Hydro-Electric Board (NSHED) are building an oil-fired power station at Boddam, near Peterhead. This power station will become fully operational by 1980, and the oil will be transported to the station by sea. In January 1976 work started on a tanker jetty in Peterhead Bay Harbour to allow tankers to off-load fuel oil for the power station.

Initially the tanker traffic is unlikely to be sufficient to employ a single tanker berth to full capacity. To the north of Peterhead at St. Fergus a terminal is being built to take gas from the Frigg and possibly the Brent fields. This, in conjunction with the possibility of tanker berthing facilities in Peterhead Bay Harbour, has caused oil and chemical companies to consider Peterhead as a site for plants based on North Sea gas; thus helping to provide stimulus for economic development in the area.

Scanitro, a Scandinavian chemical consortium, plans to produce liquid ammonia at a production plant to be established at Peterhead

using as a feedstock natural gas from the Norwegian sector of the Frigg field. The consortium plans to ship the ammonia out by tanker from Peterhead Bay Harbour. Planning permission for the project was granted by the Secretary of State for Scotland in March 1976 following a public enquiry. Shell/Esso wish to break Brent field gas down to methane, ethane*, propane, butane and gasoline; the British Gas Corporation will keep the methane, and Shell/Esso will ship out the other products by tanker through the Harbour. The present situation is that Shell/Esso have applied for planning permission for their development.

Thus, in the middle of 1974, Transport Division of SEPD had to decide what tanker facilities would be required to meet the requirements of the three prospective users whilst recognizing NSHEB as being a national priority user. There was the possibility of combining tanker facilities necessary for the power station and the Scanitro and Shell/Esso processes, thus reducing the overall cost of providing the facilities.

Management Services (Operational Research) Division of the Civil Service Department were asked in July 1974 to carry out a study which would assist with the decision about the number of tanker berths which should be built in the Harbour. It must be borne in mind that at the time the plans of neither Scanitro nor Shell/Esso were defined and could possibly be influenced by the decision about provision of tanker berthing facilities. MS(OR) Division was only one of a large group of people who were involved with the decision about Peterhead Bay Harbour: a firm of consulting engineers; staff of the Hydraulics Research Station, Wallingford; members of the Factories Inspectorate (now the Health and Safety Executive); representatives of NSHEB, Scanitro and Shell/Esso; and the Harbour Manager of Peterhead Bay (Management) Company Ltd. (responsible for day-to-day management of the Harbour).

Other users of the Harbour

Two other main groups of vessels use the Harbour. The longest established of these is the fishing fleet based on Peterhead Harbour: fishing is still of considerable economic importance to Peterhead. The other group of users are two companies who operate base facilities for vessels which service the oil rigs and pipe-line operations in the North Sea. It is necessary to consider the possible effect on each other in the future of existing and possible users of the Harbour.

Since fishing is the traditional industry in Peterhead it is important to ensure that the activities of the fishing fleet are not interfered with to an unacceptable degree. It is critical that fishing vessels must not miss the early morning fish markets as this would result in the loss of their catch of fish and, therefore, they must have priority between 6 a.m. and 7 a.m.

*It is not now planned to ship out ethane, but this assumption was valid at the time of the study.

The Operational Research study

Peterhead Bay Harbour is tidal, but after dredging it will be capable of taking tankers of up to 40,000 tons dwt. at all states of the tide. When the original study was undertaken, the proposed design for the tanker berths involved the possibility of twin berths on either side of a jetty (the design has since been altered to two parallel berths in line). Since the cost of a berth is about one-eighth of the cost of a jetty it is sensible to build either two berths or four berths (i.e. based on one or two jetties). SEPD Transport Division have always been of the opinion that two berths would be sufficient to cope with the initial tanker traffic from NSHEB, Scanitro and Shell/Esso operations. There was a wish to test this belief; even more so there was interest in investigating the extent to which two berths would be capable of coping with possible future increases in tanker traffic.

The study began with ambitious ideas of building a queuing simulation model of all the vessels using the Harbour. As the background became clearer, however, it was apparent that many assumptions could be made (and had to be made) which allowed simplification of the problem situation to be modelled.

The first problem looked at was that of interference between the tankers and the fishing vessels, and between the tankers and the servicing vessels. Fortunately, it was possible to discount these. Interference can only occur when a tanker is actually passing through the entrance to Peterhead Bay Harbour (coming in or going out). The entrance to the mouth of the Harbour is 600 ft. and the largest tanker likely to use the Harbour is 95 ft. wide. Fishing boats are much less than 40 ft. wide. It is thus generally accepted that there should be no problem of fishing vessels being unduly hampered by the tankers. A similar logic was agreed to apply to vessels which service the oil drilling rigs.

The problem thus reduces to one of estimating the ease with which two berths could cope with the possible tanker traffic generated by the five main products of the three users. This must be done for both normal summer operating conditions and for winter conditions. In winter the Harbour may be closed to tankers in certain weather conditions, since the Harbour is not considered to be safe for tankers in a south-east wind of force 6 or greater. Weather (wind) records indicate that from November to March the Harbour will on average be closed for 30 days and blocks of 10 consecutive days of closure will not be exceptional; up to 17 days' closure may occur.

A feature of the study (even at the present) is the uncertainty about the exact size and cargo handling capacity of the tankers to be used for each of the prospective products. The most likely tanker traffic can be represented as follows:

(*a*) *During summer.*

NSHEB: five tankers of 25,000 tons dwt. per fortnight, each with a turnaround time of three-quarters of a day;

or three tankers of 40,000 tons dwt. per fortnight, each with a turnaround time of one day.
Scanitro: three tankers of 10,000 tons dwt. per fortnight, each with a turnaround time of one day.
Shell/Esso: (ethane), (propane) and (butane); for each product four tankers of 35,000 tons dwt. or 40,000 tons dwt. every three weeks, with a turnaround time of one day.

(*b*) *During winter.*
NSHEB: as for summer above.
Scanitro: as for summer above.
Shell/Esso: each of the three products requires two or three tankers every three weeks, with turnaround times of one day.

In addition to the above, Shell/Esso will wish to ship out two or three tanker-loads of gasoline every year. This last product can be ignored in the general calculations, since in terms of the overall tanker traffic it is insignificant, although on the rare occasions when a gasoline tanker is due it could cause short-term management problems at the Harbour.

It is not yet known to what extent tankers will adhere to long-term, prearranged schedules. Also, details are not known as to how deliveries/collections which are lost due to bad weather closing the Harbour will be made up. As with many aspects of the study, assumptions had to be made, and were agreed with the Harbour manager, members of SEPD Transport Division and, whenever possible, with representatives of the potential users.

The kind of description of the tanker traffic given above provides a fair indication of the lack of detail available about the demands likely to be made on the Harbour. The models used have to be of a form which can accept such imprecise data, yet still provide useful answers.

The *turnaround time* assumed for a tanker is that length of time during which it prevents any other tanker from using the berth or even entering the Harbour; thus it is the total time from when the tanker starts to enter the Harbour mouth until it has passed through the Harbour again on its way out after the loading/unloading transaction at the berth. The times from entry to berthing completed, and from casting off to clearing the Harbour, are assumed to be one hour each. Thus there is a minimum period of two hours during which the loading pipes can be purged between successive tanker transactions at any berth. All assumed turnaround times are likely to be extremes, i.e. normally it will take less time to process a tanker.

As a result mainly of engineering advice it was decided that Shell/Esso will be allocated one berth for their products, and that NSHEB will share the other berth with Scanitro. This allows a further simplification of the problem. It reduces to one of considering three tanker streams only: NSHEB, Scanitro, and (combined) Shell/Esso tankers.

The interactions of the tanker streams are considered under two main sets of conditions:

(*a*) In summer, when Shell/Esso will have the higher frequency, but there will be no Harbour closures due to bad weather.
(*b*) In winter, when Shell/Esso will have lower tanker frequency, but the Harbour may be closed due to bad weather.

As stated earlier, there is uncertainty as to how the different products will actually be shipped in or out of Peterhead Bay Harbour. It was decided, therefore, to model the three tanker streams in terms of 'long-run weekly averages', which would always hold true over time. It is assumed that exactly the weekly average number of tankers is handled in any 'normal' week ('normal' inasmuch as there are no closures in the week) for each tanker stream. Within the week the tankers in each stream are assumed to arrive at random. Unreality arising from 'fractional' tankers is accepted.

All assumptions tend to be of a pessimistic nature, i.e. made in such a way that if the calculations show that the berthing facilities can cope under them, since 'real life' will not be so severe the facilities will turn out to be less strained. For instance, it is unlikely that tankers will cause each other to queue to the extent indicated by assuming completely random arrivals within a week, since Peterhead Bay Harbour has a Harbour control tower which will keep in touch with the major users in order to be aware of their plans for tanker arrivals. Thus, it will be possible to 'manage' the arrival of tankers to some extent, in order to reduce delays from interactions, although it is at present uncertain how effectively this can be done.

The servicing of tankers was investigated under four main headings:

(*a*) The 'berth occupancy' for a tanker stream.
(*b*) The 'berth utilization' of a berth.
(*c*) The 'arrival window' for access to a berth.
(*d*) The time to clear a backlog of tankers after Harbour closure.

The *berth occupancy for a tanker stream* is calculated by:

$$(\text{average number of tankers per week}) \times (\text{turnaround time}) \div 7.$$

It is the long-run average proportion of time during which a tanker stream will block a berth.

The *berth utilization of a berth* is the sum of the berth occupancies of all the tanker streams using that berth. In normal practice berth utilization is found to be between 40 and 60 per cent. It was decided that an estimated berth utilization of up to 70 per cent would be acceptable.

The *arrival window for access to a berth* is calculated by:

$$(1 - \text{berth utilization}) \times 7 \div \text{average number of tankers using the berth in one week.}$$

This gives an estimate of the tightness of the programming of use of the berth, as perceived from the aspect of the skipper of the tanker. If access to a berth is considered as being programmed in terms of blocks of time, so that all the possible available time is allocated, and each

block is longer than the turnaround time, then the difference between the block length and the turnaround time is an 'arrival window', during which the tanker can arrive and still be processed before the end of its allotted block of time. The critical size for the 'arrival window' will depend on the distance from which the tankers are coming: the greater the distance, the longer will be the minimum acceptable 'arrival window'. One of the uncertainties about the tankers is from where they are likely to be coming.

The *time to clear a backlog of tankers after Harbour closure* is calculated, based on the assumption that all the expected tankers continue to arrive during the period of closure of the Harbour and wait in the bay outside the Harbour until it opens again and it is their turn to be serviced. This provides a crude guide to the capability for recovery from closure before another closure is likely to occur. It is not suggested that when the Harbour is closed for an extended period the tankers will actually behave in this manner. It is more likely that they will be redirected to another port, and when the Harbour reopens there will be a spell of increased frequency of arrivals until the lost shipments have been made up. (Because the behaviour of the tanker streams when the Harbour is closed is very unclear, estimates of the effects of closure are the weakest part of the whole study.)

Using the berth occupancy information for the tanker streams, it is possible to calculate for any tanker stream the probability of members of the stream causing each other to queue, and the long-run weekly average amount of waiting. The probability of making members of other tanker streams queue can be calculated, and the long-run average weekly amount of waiting which results.

Conclusions from the study

A great number of different analyses were carried out based on a variety of beliefs about likely tanker traffic. These embodied the assumptions indicated above, including that Shell/Esso will have exclusive use of one berth, whilst NSHEB and Scanitro will share the second. The analyses indicate that the two berths will be capable of handling the tanker traffic outlined earlier in this article. This is true whether NSHEB use the more frequent small (25,000 tons dwt.) tankers or the less frequent large (40,000 tons dwt.) ones: the latter make an overall less intensive demand on the berthing facilities.

There is some spare capacity available at each berth:

(*a*) The Shell/Esso berth is capable of handling extra tankers up to the equivalent of that required by one of either their ethane, propane or butane production, i.e. up to an increase of one-third.

(*b*) The NSHEB/Scanitro berth can cope with up to either double the number of Scanitro tankers, or up to the level of extra tanker traffic which a second power station would imply, but only if all the fuel oil for NSHEB is shipped in by 40,000 tons dwt. tankers.

The main analyses carried out in the course of the OR study of Peterhead Bay Harbour have been outlined in brief. Some information about the background to the study has been given, and the major conclusions about the capacity of the Harbour with two tanker berths have been stated. Various other aspects were also considered, including the possible effects of 'haar' (but it will be left to the reader to discover what 'haar' is).

A simple hand queuing simulation was constructed at the start of the study. The tanker arrival patterns resulting from the assumptions of randomness were far too unrealistic to be of much use. Thus, the approach was dropped in favour of the more straightforward one described above.

One very important aspect, not as yet mentioned, is the size of the on-shore storage facilities to be constructed by the three users. Calculations indicate that a crucial factor is the lag involved before tankers can be redeployed to make up lost deliveries/collections resulting from Harbour closures in winter. If the lag in making up losses tends to be too long, there is a chance that the Harbour may be closed again before any losses are recouped, i.e. no *extra* tankers will have made deliveries/collections. In these circumstances it will be necessary for on-shore storage capacity to be equivalent to the *total* volume of deliveries/collections which it is believed will be *delayed* over the winter period. The pertinence of this conclusion will become clearer once more information is forthcoming about the manner in which tankers can actually be redeployed to make up lost deliveries/collections.

The present position with respect to Peterhead Bay Harbour is that NSHEB have started construction of the power station at Boddam, and it will be in full production by 1980; Scanitro have just received planning permission; Shell/Esso are awaiting the result of their application for planning permission which the Secretary of State for Scotland has called in; and the Peterhead Bay Harbour Authority wish to commission the jetty equipment at the end of 1977.

The study was an entertaining and practical one. It involved discussions with a wide variety of involved persons, each playing his role and representing his own organization. On two occasions there occurred what is, perhaps, one of the greatest pleasures for an Operational Research practitioner: to be present at meetings attended by various parties with interests in Peterhead Bay Harbour, and at which the results of the practitioner's analyses were tabled and formed the basis for discussion and decisions.

Most of the conclusions from the study which are given in this article will have been tested and proven true or false by 1980.

Use of Microfilm in an Accounts Division

M. H. WOODS, Department of the Environment

Malcolm Woods is an Executive Officer in the Management Services (O & M) Division of DOE, specializing in the field of microfilming systems. In the article that follows he describes a recent assignment on which he was involved and which resulted in useful cost and other benefits. —*Editor.*

Introduction

One of the tasks of the Department of the Environment's Accounts Division is to ensure that the wages of its 26,500 industrial staff are processed accurately each week. The wages are calculated by computer on the basis of pre-determined data; variations to these data are effected by input documents which set out details of the required changes.

Adjustments to these data usually arise from either a change in tax code, National Insurance contributions, savings, etc., or incorrect information entered on earlier input forms. Records need to be maintained to verify and substantiate all variations, to secure the accuracy of new input and to aid handling of pay enquiries from staff, audit, labour offices and even Courts of Law.

The problem

To keep the records up to date, approximately 9,500 separate input forms are generated each week which either provide new records or adjust the information held on the computer. A filing system was devised which provided for each employee's records to be held in separate lateral hook-on files in roll shutter cupboards. By the end of 1972 the 'live' files alone occupied 120 cupboards taking up about 540 sq. ft. of office accommodation. Apart from restricting the amount of natural light in the office, they created an unsightly and depressing working environment and imposed a significant strain on the floor loading.

As well as the sheer physical size of the payroll record, there were other factors which indicated the need for a complete reappraisal of the system. For instance, it was established that only the most recent papers on the files need be retrieved; 'weeding' of the files was, however, rejected since this would have been a slow and expensive operation which would not have significantly reduced the storage problem. Also, as some of the records were in the form of computer print-out, the individual files began to expand in any case because of the larger sized, and hence more bulky, computer stationery which was

being generated by a newly installed, new generation of computer. At the same time it was estimated by Accounts Division that it was costing in the region of £10,000 per annum in staff time, equipment and accommodation costs to maintain the record. It was against this background that Accounts Division, in considering ways of improving the Pay Sections' working conditions, decided that priority must be given to the removal of the filing cabinets and that the use of microfilm held out distinct possibilities. At this stage O & M Division were asked by Accounts Division to investigate the storage and retrieval problems for the industrial and non-industrial payroll sections and to design an appropriate microfilm system to replace the existing record files. In the view of Accounts Division it was essential that any alternative record system should enable clerical staff to be informed quickly of previous and current input to the computer without utilizing large areas of office accommodation.

The solution

A wholly computer-based system was considered impractical and expensive and it was decided that a microfilm jacket system was the most suitable format since it leant itself easily to retaining the one file per payee system already in use.

Before devising a system, however, it was decided that a pilot study should be run based on one of the Pay Sections that maintained a proportion of the payroll record to assess the feasibility of a microfilm system as well as to test the attitude of the staff to the acceptance of microfilm as a medium for maintaining the payroll records: 'customer' acceptance has always been regarded as crucial in all of the Department's applications.

The pilot study

As each pay clerk dealt with approximately 1,000 files it was decided that one 'seat' would be ideal for the pilot study. The actual filming and jacketing were carried out by a microfilm bureau, as was the up-dating of the jackets. This was not a particularly convenient arrangement since delays tended to occur between despatch of the hard copy to the bureau and receipt of the up-dated jackets; consequently papers were out of the office for a period of time which would not have been acceptable to Accounts Division in any final system. The pilot study also proved to be a good opportunity for staff to help in evaluating the microfilm readers which would have to be considered eventually for use in a live system.

Broadly the pilot study showed that:

(*a*) No difficulties were experienced in using either the microfilm jackets or the microfilm readers.

(*b*) To refer to microfilm was just as convenient as to refer to a file. Obtaining the microfilm jacket was, however, quicker than

retrieving a file, but it took longer to isolate a particular document in the jacket than in the file, although it was expected that familiarity with the new medium would go some way to reducing this time.

(*c*) The time taken to up-date the jackets via the bureau was too long and would not be acceptable in a live system requiring up-dating within 48 hours.

(*d*) In general, all the staff who participated in the study, as well as other members of the payroll staff, accepted the new medium and were very much in favour of a microfilm system.

The system

In order to facilitate the changeover it was decided that the initial work of filming, jacketing and indexing the jackets should be undertaken by a bureau within a phased programme over a period of six months. Once the microfilm records had been created, however, it would be necessary to keep them up to date within a 48-hour turn round time to meet the requirements of the Pay Sections. Clearly, therefore, an in-house microfilm unit would have to be set up within the Department rather than arrange for this work to be undertaken by a bureau as well.

It had been estimated that some 4,000 pieces of input each week would have to be filmed and inserted into approximately 2,000 jackets. To cope with this workload the unit was equipped with a manually fed rotary camera, a microfilm processor, a jacket filler and a manually fed diazo microfiche duplicator. A densitometer, microscope and check viewer were also installed for quality testing of the processed film. With the installation of the equipment the system went progressively 'live' as the bureau returned the microfilmed records under the previously agreed programme.

The system in use

Diazo duplicates of the jackets form the 'working' copy of the record used by the Pay staff and the jackets containing the original silver film are retained within the microfilm unit as a separate secure record of the payroll. The procedure for up-dating the record requires that pay clerks send the input papers to the microfilm unit where they are filmed, inserted into the appropriate jackets and then duplicated. The duplicates are then returned to the pay clerk who disposes of the superseded microfilm. This method ensures that even when the up-to-date papers are away from the section, albeit for a limited period, some kind of record is readily available within the Pay Section for answering queries.

As the live system developed, progress was closely monitored by both Accounts and O & M Division staff to ensure that solutions to the inevitable problems could be found quickly. One such problem was the very small size of some of the material to be filmed. When a small form constituted the sole up-date to a payee's record it meant that a chip of

16 mm film probably no bigger than 5 mm had to be inserted into the appropriate jacket. These single chips of film tended to either override the film already in the jacket or to feed into the jacket at an angle. After tests were carried out on various jacket fillers it was found that a more precisely engineered model was available which could handle small chips of film.

Once the system had become fully operational, it became possible to realize the full benefits which the project set out to achieve. Of the 120 or so cupboards originally required to store the records, only 20 now remain, thus relieving the floor-loading problem and allowing natural light into all parts of the working environment, which has now been laid out as an open plan office, as intended when the office was built.

Cost benefit

At the outset of the assignment it was estimated that the annual cost of maintaining the industrial payroll record was, as has already been stated, £10,000 which included over £8,000 for staff costs, the remainder relating to the costs of accommodation and materials. The microfilm system resulted in the saving of three filing clerks, which alone was sufficient to cover the annual cost of setting up and manning the in-house microfilm unit. The benefits to the working environment of the office, the improved efficiency within Accounts Division in dealing with queries and the relief of the floor-loading problem have, therefore, been achieved at no extra expense to the Department.

The future

With the successful conversion of the industrial payroll records to microfilm, Accounts Division wants to extend the system to cover all the payroll records of the Department for weekly (12,000) and monthly (36,000) paid non-industrial staff as well as authorities made by all staff for deductions from their pay, which in all will involve the creation and up-dating of a further 100,000 jackets. Because of the increased number of pieces of input that will obviously be generated, additional equipment in the microfilm unit will inevitably be needed but, once having established the microfilm unit, it is hoped to achieve further cost benefits as well as improve the working environment for all of the staff of the Pay Sections in the Accounts Division of the Department.

An Old Hand Welcomes the *Guide for New Managers*

Dr. E. N. GLADDEN

Norman Gladden entered the Civil Service in 1913, and was employed in the Post Office, Ministry of Labour and Ministry of Pensions and National Insurance up to his retirement in 1958. He is the author of a number of books on the Civil Service and Public Administration. —*Editor.*

My immediate reaction to the *Guide for New Managers* was 'what a godsend this would have been to us, both as managers and as trainers in management, when the former Ministry of National Insurance was being launched in the late 'forties to take over and extend the national insurance schemes'.

As I am writing about a period that must already appear somewhat remote to most civil servants I must first present my credentials. In common with the majority of local office managers in the new Ministry I, a newly promoted Senior Executive Officer, was also new to management. My previous service, with the Ministry of Labour and National Service and earlier with the Post Office, had not included management in its full meaning, but it is important to emphasize that, although not to be compared with actually experiencing the responsibilities of managing, members of other grades down to the base of the hierarchy are all the time subject to management, perhaps sometimes to mismanagement, and should therefore know a good deal about it.

Initially, I was attached to the Ministry's Midland Regional Office in Birmingham early in 1948, when the insurance work of the superseded Approved Societies was being run into the new scheme, due to operate from 5th July. Within a matter of weeks I was switched to take over the local office at Edgbaston, where the new manager had already decided that managing was not his cup of tea and, while his attitude was not very favourably received at Regional Office, it was clear that he was not the man to cope with the unexpectedness and strains which would certainly arise when the new arrangements came to be practically tested. During my stay in this office we had one general reorganization of work to implement, and then I was transferred to our largest Birmingham office at South Yardley (also a SEO office) which was itself ready to be subjected to the revised patterning. In 1951 I was switched to take charge of the outstationed Regional Training Centre, where plans were being formulated for the training of both supervisors and managers. It was very much a case of the blind leading the blind, and our managers certainly had little use for courses in management.

Such prejudices were strongly held, especially among the older managers. The new Regional Training Officer's recent managerial experience was to prove a great asset in this respect. Not that we ever set out to teach them management: the courses were so designed as to entice them to teach each other.

The nature of management

The *Guide* immediately raises in our minds the question 'Who are the managers and what is management?' It is interesting to note that the advice is aimed at about the level of Higher Executive Officer and equivalent grades. This was broadly our requirement, although we had a few offices under Executive Officers and a number under Senior Executive Officers. The Region had only one Chief Executive Officer (now Principal) manager.

The question of distinguishing between supervision and management inevitably arises, and, in accordance with his well-known theories,[1] Lord Brown in his review of the *Guide*[2] insists 'The time is long overdue when terms like supervisor and manager should be precisely defined'. It seems doubtful, however, that absolute precision is achievable in defining such a varied and flexible sphere of activities. Supervision and management are both aspects of the same broad activity. Supervision is contained in management: every manager has supervisory concern with the work of those immediately below him (but minimally in normal circumstances). The *Guide* states 'If management is the art of getting work done through people then supervision is management in miniature'. Where precision of definition is still elusive such succinctness is an admirable substitute. What a good idea to impress upon all first-line supervisors the notion that their true function is 'management in miniature'. However, the manager to be effective must enjoy a high degree of autonomy in his specific managerial sphere, but this is not normally the case of the first-line supervisor.

Importance of staff relationships

The entire *Guide* is, of course, concerned with the nature of management, but nowhere does it come closer to defining its essence than when it considers the manager's relationships with his staff. But my eyebrows went up steeply when I read 'Now that the manager can no longer be that remote figure that barks "Jump" . . . '. Did this ever apply to the Civil Service, even in the workaday Post Office? In all my forty-odd years of service I remember less than half a dozen senior officials who could have been categorized even dimly thus, and they were usually looked upon pathetically by the rank and file. As a useful discussion point the expression may, perhaps, be allowed to stand.

There are, however, two references under the present heading, as it

[1] See, for example, his highly recommended comprehensive study *Organization*, published by Pelican Books, 1974.

[2] Published in the November 1975 edition of *MSIG*.

happens of contrary intention, that deserve comment. First, 'You cannot be a good manager and be "Popularity Jack" ': this is surely true. I remember one of our senior managers whom I found in his shirtsleeves and in process of doing some filing. Admirable, if it gave him an insight into why files got misplaced, and a good example to his staff, provided it was not overdone. But I also noticed, during a short training visit, that members of his staff called him 'Jack' and affectionately patted him on the back. Under general pressures later the office ran into trouble—not the manager's fault—but he proved not to have the authority to cope with it, as other managers were able to do. The contrary quotation is 'One of the most persistent criticisms of managers is that of remoteness'. For example, there was the man so involved in clearing up his knotty problems (instead of allowing his deputy to share with him) that he habitually walked hurriedly to his *sanctum sanctorum* in the morning and was rarely seen again (even in the canteen). It is a question of striking a balance, and much depends upon the current situation. As the *Guide* maintains every manager has his own style and should cultivate it. On the other hand it is not misguided to take note of someone who has been successful in the management role.

Whenever the manager has reason to penetrate into his offices he should not only see but *feel* that the situation is satisfactory. No army-type inspection is called for, but his staff will always appreciate his taking an interest in what they are doing, though never to the extent of his breathing down their necks. That is the task, and only when necessary, of the first-line supervisor. The manager's reason for being out in the office varies, but he must acquire the habit of taking everything in as he goes along. This is not so difficult when the place is properly organized, another matter in which the admonition of the *Guide* against untidiness and any signs of grubbiness is so much to the point. Standards have to be set and maintained and seniors far from being exempt have to set an example.

Responsibility for training

On the important subject of training the *Guide* clearly adumbrates 'Without local training at the desk, the benefit of central training can be lost'. I would be inclined to substitute 'will' for 'can' in this pregnant statement. Too many managers in the past were inclined—even after protesting that such courses were time-consuming—to adopt the attitude that once central training had been provided the training task was completed and they had no further responsibility in the matter. Actually, however good and essential such training undoubtedly is, it forms only a small part of the training requirement. Responsibility for staff training is part of the supervisory function. Not only are refresher and revision courses required from time to time at the training centre, but informal training at the desk and by other means is a continuing responsibility of management. The 'cradle-to-grave' concept is even more apposite to education and training than it is to social security.

This includes importantly the encouragement of staff members, especially juniors, to pursue spare-time studies in a wider educational sense. The manager's viewpoint when it is generally known has particular weight here.

Co-ordination of the two types of training is important. At the centre we attempted to ensure their integration in the early stages by devising brief training guides on the several branches of the work, particularly for the use of supervisors. These guides outlined the steps that should be taken in local offices to ensure that officers allocated to courses should come to the centre with preliminary experience on the actual work sufficient to enable them to derive maximum advantage from the courses, which were necessarily of short duration. Incidentally, this was an operation for the checking of which the supervisor would have found an 'action sheet' of the type mentioned in the *Guide* useful.

On the question of encouragement the position then was far from clear cut. There was widespread prejudice against any formal training after the normal induction period. Offices often found themselves undermanned for various reasons but had to get on with the job. Consequently officials who devoted too much energy to self-improvement, even in their own time, were not keeping their eyes on target. Managers had plenty of worries, and after all had not most of them come up the hard way? I wonder whether that particular type of 'practical' outlook has completely disappeared, despite the growing complexity of the world which places a premium on deeper thought. For example, would it not be fair to attribute the phasing out so soon of the short-lived Diploma in Government Administration experiment, initiated in the late 'fifties by the Civil Service specially for civil servants, to the lack of enthusiasm for it on the part of seniors? Such attitudes were frequently reported by members of such courses. Too often the complaint was not merely about lack of enthusiasm but a definite impression was sometimes conveyed that such activities would inevitably take their juniors' minds off the job and were, therefore, to be deprecated.

The manager is the key figure in all this; he may not be actively antagonistic, but he must at least ensure that his supervisors do not adopt a discouraging attitude. After all, they have a job to get done and are hardly to be blamed if they find it inconvenient to have members of the staff eager to get away to attend classes. They will feel much easier if they are aware that the manager is prepared to make allowances in such cases. Whatever the immediate inconveniences, on a longer-term view such activities will be to the advantage of the Service as much as to the individual concerned. In a changing world training to cope with the future is everybody's business and, as is being more and more widely recognized, training for the advent of retirement has to be included in the programme.

One training problem of ours may have lessons in other situations. We had offices of three grades—with EO, HEO and SEO managers

respectively—and it was strongly maintained that, in view of obvious differences in the problems and responsibilities of the offices, separate courses should be provided for each grade. In particular, the position was aggravated by the existence of a number of small Executive Officer directed offices, the management of which presented problems which were quite different from those arising in larger offices. It should be explained that the existence of these uneconomical units was rendered necessary in thinly populated areas to meet the political requirement, laid down at the launching of the new social security system, that as far as possible every insured person should have easy access to a local office. But to have provided separate courses in the Region for each grade would have presented serious staffing problems and it was decided that mixed groups should be organized. In practice it was found that the degree of mutual training, which is of paramount importance in management training, was enhanced. Staff attending the courses gained quite a lot from seeing in true perspective the differences in management arising from differences in scale of operation and size of staff; in other words, from appreciating the other fellow's point of view. Incidentally, in a different context, it was also a gain to have older members present, even staff within a year or so of retirement, who, once they had been enticed into the 'class-room' invariably had valuable experience to retail and were often among those most eager to impart it to others.

And so forth

Many debating points will be induced by the *Guide*, as users will discover as they go along, and one could extend this examination *ad lib*, but space is becoming short. Thus, I would have liked to comment at length on the suggestion that fast and slow lines should be made use of in organizing work processes. Such an arrangement had been introduced in the large Birmingham local office mentioned earlier, but when I arrived I soon came to the conclusion that, whatever the justification for this arrangement when it was originally introduced, it had outlived its usefulness. Clerks on the slow line had become over-meticulous and its slowness was exaggerated, while those on the fast line were in so much of a hurry that they tended to overlook important factors that needed further investigation. My general conclusion was the very opposite of that of the *Guide*.

There are two matters to which further attention could profitably be given: (*a*) matching the individual members of staff to the job, and (*b*) achieving effective internal publicity, both sources of acute managerial headache.

On (*a*), in a strictly graded Service the problem of deploying to the best aggregate advantage inevitable variations in performance of members of the same grade is not easily solved. Some workers are by nature quicker than others, some more accurate, some achieve higher quality, and so forth. Different jobs and work situations call for the

several capacities in varying degree. The competent manager has to take all this into account when making, or approving, staff allocations. Despite the assumption that all members of the same grade are interchangeable, he knows that they are not, not only because of the differences mentioned but because a wide range of personal preferences has to be taken into account. The Civil Service manager does not choose his staff and cannot reject them, or alternatively 'de-select' them, as Lord Brown interestingly argues in his discussion of the wider problem (*Organization*, p. 102 *et seq.*). Thus many of the assumptions on the essence of management in the text-books are not applicable to the Civil Service without serious modification. Size of command is important in this connection. I certainly found staff allocation much easier in an office of a hundred staff than in one of half the size. At the lowest assessment it is easier to park the few inevitable passengers!

On (*b*) above, the achievement of effective internal publicity is fraught with many problems. In the Ministry of National Insurance there was no shortage of printed instructions, carefully classified in a series of codes, all quickly available to those members of the staff who needed to consult them. But everything could not, indeed ought not to, be thus laid down in print. Briefing sessions are needed to supplement the instructions and to draw special attention to matters of importance to the particular office. This meant that the manager held regular briefings for his deputies, and other supervisory staff when necessary, and so on down the line by supervisors dealing with matters appropriate to their particular level. On special occasions, when radical changes in organization or procedure were introduced, the manager would address the staff in general terms, so that they should all be included in the broad picture. Such occasions were fairly frequent at the inception of a scheme of such wide ramifications, but otherwise they were rare: though this may no longer be the case when administrative changes seem to follow hectically one upon the other.

As everyone knows, problems arise in keeping the normal information channels open. Notice boards need to be effectively positioned, not pushed away in some corner, and kept clear of dead paper. Some notices are best circulated and, perhaps, need to be initialled, in which case they tend to get stuck in the pipe-line, or rather to stagnate in some dilatory member's in-tray. It should be someone's job to keep the pot boiling.

Clearly, the manager who absorbs the precepts to be found in the *Guide* will find himself better equipped to cope with the running of his office efficiently and of obtaining the maximum co-operation of every member of his staff in the process; and the staff trainer (which includes, of course, every supervisor) should be able to draw out from his own experience many more insights on the fluctuating desk situation than he may hitherto have imagined.

Developments in the Home Office Registry System

The Home Office has, in recent years, been adapting the theme system of indexing to suit its particular needs. Much of the credit for the success of the schemes that have been introduced is attributable to the contribution made by the late Mr. Jack Weston. Mr. Weston, who had been kept alive by a kidney machine for about ten years, spent the last three years of his life defying retirement and devoting his energy to the successful completion of the work he had been given.

The article that follows was written by staff of the Chief Registrar's Branch, Home Office as a tribute to their former colleague and to provide a permanent record of the part Jack Weston played in the development of the Home Office registration system. —*Editor.*

Introduction

As with most Government Departments, the work of the Home Office has increased in range and complexity over the years, with a continual shift of emphasis from one aspect to another.

These changing circumstances have been accompanied by changes in the Home Office registry system to meet the altered requirements; and this article describes some of the interesting features of these changes in the hope that they may be found useful to other Departments.

Registration system

The purpose of any registration system is to provide an efficient and rapid means for the retrieval of information, thereby assisting in ensuring that the right course of action is taken in dealing with a current situation. The registry's role is very important in providing this information, and whatever system is adopted has to be capable of classifying information according to its characteristics to enable quick and economic retrieval to be effected at a later date.

Hitherto the majority of the Home Office registration schemes have been based on what is termed the hierarchical principle (the term pre-classified also being used in the Home Office to describe such schemes). This method of registration involves the sub-division of any subject from the greater to the lesser by means of main, secondary and sometimes tertiary titles: it provides a reasonable means of subsequent retrieval in a fairly static situation but the structure of headings is rigid and gives rise to difficulties under conditions of change. For example, the scheme may assume that work arising under main heading 'X' will always divide naturally into aspects 1, 2 and 3; but '3' might quickly become the main feature and 'X' merely an aspect of that. An hierarchical scheme has difficulty in coping with this situation. Moreover, this scheme does not work well where the subject-matter has overlapped more than

one heading and there is a danger that vital information is subsequently not produced. To overcome such problems it has been necessary in many instances to produce in parallel with a hierarchical registration scheme an alphabetical index to aid subsequent searches. It is not wrong to do this, but the need to do it may indicate that an unsuitable type of classification scheme is in use.

The hierarchical system has shown itself to be inadequate in certain subject areas for retrieving all the information necessary for the managerial and administrative problems of today. It will continue to be used in areas where it is considered to be the most suitable method of registration, but recently, whenever a new registration scheme has been required, consideration has been given to using the 'theme' system of registration.

The theme system

The theme system of indexing was described in some detail in a supplement to the then *O & M Bulletin* of August 1967. Briefly, when a file is created using the theme system, two subject headings are usually chosen which together are considered to best describe the subject to which the papers refer. This combination of subjects is called a theme. Ideally, the breadth of coverage of a theme should be such that it could embrace a series of files, each on a different topic within the theme, but not so wide that a host of unrelated topics could be included.

For ease of reference, the term 'indicator word(s)' will be used in the remainder of this article to describe the subject headings used in the theme system. It is an appropriate term since their purpose is to point to the file series containing the information required. Each indicator word is numbered as it is brought into use.

Provided material is fully indexed under the appropriate indicator words for its various subjects, at initial registration and added to as a subject develops, the retrieval of the file at a later stage is possible, regardless from which direction the search is approached.

In recently introduced and future Home Office theme registration schemes the file reference consists of a two-letter prefix indicating the division, followed by the numbers allocated to the two indicator words selected (the file series); and then a serial number for each of the files opened in that file series. This numbering system means that the registrar, having analysed the material into more than two subjects, is faced with the problem of deciding which two to use to produce the file series. In doing this he needs to consider:

(*a*) The two most important subject terms.
(*b*) The terms most likely to be used later by a divisional officer wishing to retrieve the papers.

Any indicator words additional to the two chosen for the series are used in the alphabetical subject index for referring to the file series on which the material has been placed.

Alphabetical list of indicator words (thesaurus)

The success or failure of the theme system depends to a large extent on the list of indicator words used. An important question that needs to be considered at an early stage is what should be the coverage of the list.

The Home Office takes the view that there should not be only one list of indicator words to cover all the subjects it deals with, nor necessarily one list for a group of related divisions. Such lists of wide subject coverage could consist of several hundred or thousand words, with the following operational difficulties:

(*a*) An indexer can be spoilt for choice and, depending on the interpretation of the subject headings or, perhaps, personal preference, an inconsistency of indexing may arise.
(*b*) The first possible suitable indicator word found may be used because the prospect of looking for a more appropriate one is daunting.
(*c*) An imbalance can develop between the level of detail of the words used to the extent that some headings may be specific aspects of others.
(*d*) The intention to make the words widely acceptable sometimes means that they do not cater specifically for certain areas of a division's work. This results in the need to use several indicator words when compiling the indexes.

Each of the difficulties at (*a*) to (*d*) above refer to the registration stage. To some extent they apply also when searching for papers.

The Home Office favours a flexible approach which entails building up separate lists tailored to the special needs of the divisions concerned. This contrasts with the large hierarchical schemes that have hitherto covered the work of a number of divisions.

The advantages of this approach include:

(*a*) More appropriate terms at the right level of detail.
(*b*) File series created are more meaningful to both divisional and registry staff, making communication between the two easier.
(*c*) The list is shorter and thus more memorable.
(*d*) Less effort is required to scan the list to select words for indexing and retrieval.
(*e*) Vocabulary control over terms used is easier because synonyms or near-synonyms are more easily seen.

An additional advantage is that local lists facilitate the transfer of files and associated records when a block of work is moved from one unit to another.

The thesaurus for each registration scheme is produced in advance of its introduction by divisional and registry staff who, in compiling the list, have considered as far as possible the use to which each indicator word will be put.

In general terms an indicator word should not be so broad that it could

be used for a large part of the work covered by the scheme (no more than 10 per cent), nor so narrow that its use is limited to one or two files.

In preparing the thesaurus, existing file series are examined to ensure that the current subjects for the block of work for which the scheme will operate are fully covered. Provision is also made for subjects known to be arising in the foreseeable future. It is desirable to limit the number of indicator words in any one thesaurus to a workable number (normally 200–300), although an unlimited number of lead-in words, etc., may be used.

The thesaurus for each scheme is reviewed regularly to cater for additional subjects and for subjects that have grown. It may also be necessary to make more specific any indicator word(s) that have proved to be too broad thereby overloading a file series. Before adding an indicator word to the thesaurus, however, the registry supervisor ensures that no suitable word already exists and that the additional indicator word follows the principles outlined above. In cases of doubt the Chief Registrar, or his deputy responsible for registration schemes, is consulted.

In order to restrict the list of indicator words in the main subject theme to a workable number, registration schemes requiring individual files for a large number of establishments, outstations, equipment, appliances, chemicals, local authorities or police authorities do not include these by their name in the main subject theme, although the broad term may be included for dealing with all establishments, or type of appliance, etc., on a particular subject.

The registration of such material is catered for by producing a separate alphabetical list, or lists, of establishments, etc. The specific 'nominal' heading is used in conjunction with the appropriate indicator word from the main subject theme to create a file series. For example, assuming the material to be registered is about the 'Introduction of Programme Accounting in . . . shire Constabulary', the appropriate indicator words would be PROGRAMME ACCOUNTING from the subject list linked with '. . . SHIRE CONSTABULARY' from the Police Authorities list to form a file series.

Ephemeral papers

Provision is made for the separate registration of material of an ephemeral nature enabling its early destruction (normally two years after action has been completed) and avoiding more permanent files being cluttered with papers of an ephemeral nature.

The procedure for registering such material is basically the same as for permanent files. Identification is by a capital letter 'E' preceding the file serial number thus: XY 12/34/E1. It would be impracticable to detail in this article items that can be treated as ephemeral since each division has different types of papers. However, a broad principle followed is 'any material that is unlikely to be called for when action is completed and is not required for permanent or semi-permanent preservation'.

Staff need not be reluctant to use ephemeral files merely because they are not certain how a subject will develop. Material on an ephemeral file can be transferred to a permanent file series at any time a divisional officer considers that the material, or extract if applicable, is worthy of retention for a period longer than two years after action is completed. Material considered noteworthy must not be kept on an ephemeral file, but must be re-registered to a permanent file series as soon as its noteworthiness becomes apparent.

Organizational changes

In the late 1960s investigations into delays in dealing with correspondence highlighted the need to re-examine the allocation of responsibilities between the registry and divisions for filing work. It was noted that there was a tendency for divisional and registry staff to regard themselves as separate entities, causing a harmful effect on morale and the standard of service given. The physical separation of certain registries from divisions served and also the Chief Registrar, who could be located several miles away, also caused problems of control.

Against this background, the Home Office set up a Working Party in 1970 on the 'Organization of Registry Services'. This reported in favour of decentralizing registries so that the registry work forms part of the clerical work of the division as a whole, and several experiments to this end were put in hand.

An example was the open office plan experiment at Kew. There the closer working relationship between registry and divisional staff resulted in a speedier service under such conditions. And there, too, the Home Office had used the theme system of registration based on a list of subject headings to suit the special nature of the work. This proved itself more flexible than the traditional hierarchical system.

As a result of experience gained in successive trials the Chief Registrar's Office is installing registration schemes tailored to the particular needs of divisions, and, wherever practicable, at the same time passing over control for the clerical staff to the division concerned. The Chief Registrar retains the right to audit the filing practices and procedures to see that they meet the required standards and comply with the requirements of the Public Records Act.

Conclusion

With the gradual introduction of the theme system of registration into appropriate areas, the most effective registry situation has, perhaps, been found in the Home Office, with organizational units, large and small, controlling their own registration schemes tailored to suit their particular subject area.

An additional important benefit resulting from the trend towards individually tailored registration schemes and the closer working relationship between registry staff and the divisions they serve is an apparent increase in the job satisfaction of the clerks.

Machinery of Government—1975

Structure of Government

At the end of 1975, the total number of Ministers in the Government stood at 109. Of these, 16 sat in the House of Lords, 92 in the House of Commons, and 1, the Solicitor General for Scotland, was not a member of either House. Over the year as a whole, the number of Cabinet Ministers increased from 23 to 24; the number of Ministers outside the Cabinet remained at 28 and the number of Parliamentary Secretaries dropped by one to 33. The number of Government Whips in the House of Lords also fell by one.

Under the Ministerial changes announced by the Prime Minister in June 1975, the Secretary of State for Foreign and Commonwealth Affairs was also appointed Minister of Overseas Development. However, a Minister of State in the Foreign and Commonwealth Office, with the title of Minister for Overseas Development and a seat in the Cabinet, is, through the Secretary of State's delegation, in charge of the work of the Ministry of Overseas Development. The two Departments themselves remain separate Departments of State.

Transfer of departmental functions

Following the Prime Minister's statement in the House on 20th December 1974, Ministerial responsibility for selective regional assistance under Section 7 of the Industry Act 1972 and for Government factories and certain related industrial steering and promotional activities in Scotland and in Wales was transferred administratively from the Secretary of State for Industry to the Secretaries of State for Scotland and for Wales respectively on 1st July 1975.

Northern Ireland Convention

Elections to the Northern Ireland Convention provided for in the Northern Ireland Act of 17th July 1974 were held on 1st May 1975, and the Chairman of the Convention, Sir Robert Lowry, the Lord Chief Justice of Northern Ireland, submitted the Report of the Northern Ireland Convention to the Secretary of State for Northern Ireland on 8th November 1975. It was laid before Parliament on 20th November 1975. The Secretary of State reconvened the Convention to sit for a limited period from 3rd February 1976.

Public Bodies established in 1975

Advisory, Conciliation and Arbitration Service

The Advisory, Conciliation and Arbitration Service which was set up administratively by the Secretary of State for Employment on 2nd

September 1974 was put on a statutory basis by the Employment Protection Act passed on 12th November 1975. The Act enabled the Secretary of State to appoint the Council of the Advisory, Conciliation and Arbitration Service, a Central Arbitration Committee to replace the Industrial Arbitration Board and a Certification Officer who is responsible for certifying trade unions as independent. The Service is charged with the general duty of promoting the improvement of industrial relations and, in particular, of encouraging the extension of collective bargaining and, where necessary, the development and reform of collective bargaining machinery.

In addition, the Act provides for the establishment of an Employment Appeal Tribunal to hear appeals from industrial tribunals which at present go to the High Court.

Air Travel Reserve Fund Agency

The Air Travel Reserve Fund Agency was created under the Air Travel Reserve Fund Act of 22nd May 1975 to administer a fund set up to reimburse losses or liabilities incurred by certain customers when air travel organizers were unable to meet their financial commitments. The fund is financed by contributions required by regulations made under the Act from air travel organizers. The members of the Agency are appointed by the Secretary of State for Trade after consultation with the Civil Aviation Authority.

British National Oil Corporation

The British National Oil Corporation was set up on 1st January 1976 by the Petroleum and Submarine Pipe-lines Act 1975. The Act gives the Corporation powers to search and drill for petroleum anywhere in the world, to refine and trade in it, to hold participation interests in offshore licences on behalf of the Government, and to carry out any associated activity. Under the Act, the Secretary of State for Energy appoints the members of the Corporation and the Corporation is subject to the general supervision, and, in certain of its activities, to the particular approval or direction of the Secretary of State.

In addition to setting up the British National Oil Corporation the Act deals with licensing for exploration for, and the production of, petroleum and introduces controls over the construction, use and safety of submarine pipe-lines and the construction and extension of refineries.

Commissioner for Local Administration in Scotland

The Local Government (Scotland) Act which came into force on 8th May 1975 provided for the appointment of a Commissioner for Local Administration in Scotland with powers similar to those of the Commissioners in England and Wales to investigate complaints made by members of the public of injustice as a result of maladministration by local authorities in Scotland. The Act also enabled the Commissioner to investigate complaints made against education committees, water development boards, river purification boards and other bodies dis-

charging local government functions in Scotland, and for this purpose he has wide powers to call for documents and other information, to summon witnesses and to take evidence.

Like the Commissioners in England and Wales, the Commissioner for Scotland is not to investigate complaints when the complainant already has a right of appeal to a tribunal, a Minister of the Crown or a Court of Law, unless in the particular circumstances the Commissioner considers that it was not reasonable for the aggrieved person to have exercised this right. Nor may the Commissioner investigate any action by a local authority which in his opinion affects all or most of the inhabitants in the area of the local authority concerned. There are also certain other areas not subject to investigation, e.g. complaints connected with the conduct of criminal proceedings, complaints about the contractual or commercial transactions of local authorities and complaints about the conditions of service of local government staff.

The passing of this Act means that there is now machinery for the redress of grievances in the field of local government administration throughout the United Kingdom, since the Northern Ireland Commissioner for Complaints has similar functions in Northern Ireland.

Like the Commissioners for England and Wales, the Commissioner for Local Administration for Scotland is appointed by the Queen on the recommendation of the Secretary of State after consultation with bodies representing local authorities in Scotland.

Equal Opportunities Commission

The Sex Discrimination Act of 12th November 1975 provided for the establishment of the Equal Opportunities Commission. The Commission is appointed by the Home Secretary to work towards the elimination of discrimination and to promote equality of opportunity between men and women generally; it is also required to keep under review both the working of the Sex Discrimination Act 1975 and the Equal Pay Act 1970 and, where necessary, to submit proposals for their amendment to the Secretary of State.

The Commission has the power to conduct formal investigations and to require persons to furnish the necessary information relevant to those investigations. Where, in the course of an investigation, the Commission becomes satisfied that an individual is committing an unlawful act, a non-discrimination notice may be issued which the Commission may subsequently seek to enforce in the courts.

Land Authority for Wales

The Community Land Act passed on 12th November 1975 gives local authorities and new town development corporations in England and Scotland new duties to acquire, manage and deal in land which in their opinion is suitable for private development and makes other provisions in connection with public ownership of land. These powers also extend in England to the Peak Park Joint Planning Board and the Lake District Special Planning Board. In Wales the powers are vested in the

Land Authority for Wales, whose members are appointed by the Secretary of State for Wales, and in new town development corporations. The powers of these various authorities to acquire land may be exercised either by agreement or, if necessary, by compulsory purchase, where authorized by the appropriate Secretary of State.

National Consumer Council

The appointment of the Chairman and members of the National Consumer Council and the Chairmen of the Scottish and Welsh Consumer Councils was announced by the Secretary of State for Prices and Consumer Protection in the House of Commons on 2nd May 1975. This gave effect to the Government's proposals set out in the White Paper (Cmnd. 5726) published in September 1974.

The establishment of the National Consumer Council is intended to ensure that decision makers are able to take into account consumer interests as well as those of producers. Its functions are to make representations of the consumer view to Government and others, to be available to be consulted by those seeking such a view, and to represent the consumer on appropriate bodies. It also considers the consumer interest in matters referred to it by the Government.

The Council is a non-statutory body incorporated as a limited liability company. The Chairman and members are appointed by the Secretary of State after consultation with consumer and women's organizations. The Scottish and Welsh Consumer Councils operate under the aegis of the National Consumer Council. The Northern Ireland Consumer Council is administered separately by the Northern Ireland Department of Commerce but its Chairman is a member of the National Consumer Council as are the Chairmen of the Scottish and Welsh Councils.

National Enterprise Board

The Industry Act of 12th November 1975 established the National Enterprise Board. The Board, appointed by the Secretary of State for Industry, was set up to develop and assist the economy of the United Kingdom by the promotion of industrial efficiency and international competitiveness in industry and to provide or safeguard productive employment in any part of the United Kingdom. The Board may establish, maintain or develop any industrial undertaking and promote or assist the reorganization of an industry or any industrial undertaking, and extend public ownership into profitable areas of manufacturing industry. The Board has a responsibility to promote industrial democracy in those undertakings it controls, and it may take over, and hold and manage, publicly owned securities and other property.

Policyholders Protection Board

The Policyholders Protection Board was set up under the Policyholders Protection Act of 12th November 1975 to administer the Act's

provisions for the protection of certain policyholders who may be affected by the inability of authorized insurance companies carrying on business in the United Kingdom to meet their liabilities. The Board's members are appointed by the Secretary of State for Trade. To finance their expenditure, the Board may, under the Act, impose levies on insurance companies and others engaged in the insurance industry in the United Kingdom.

Scottish Development Agency

The Scottish Development Agency was established by the Scottish Development Agency Act of 12th November 1975. The Agency's objectives are to provide for the further economic development of Scotland with a special emphasis on providing, maintaining and safeguarding employment and on improving the environment. The Agency will, therefore, be involved in the establishment of new industrial undertakings, either by itself or as joint ventures; in performing an investment bank function to Scottish industry aimed at strengthening, modernizing and expanding industrial undertakings; in providing and adapting premises for industry; and in bringing into use or improving the appearance of derelict land. It will be concerned to promote industrial democracy in undertakings which it controls.

Members of the Agency are appointed by the Secretary of State for Scotland.

Welsh Development Agency

The Welsh Development Agency was set up under the Welsh Development Agency Act of 12th November 1975 and has powers and functions similar to those of its counterpart in Scotland. Members of that Agency are appointed by the Secretary of State for Wales.

Management Bookshelf

Mrs. B. M. HOWARD, Civil Service Department

'It is the intention to notice in the Bulletin, from time to time, books which can be commended to O & M officers. We shall attempt nothing in the nature of a literary review or criticism; our purpose is to do no more than appraise the interest or value of the book noticed in relation to O & M work.' This note appeared in the first issue of the old *O & M Bulletin* (the forerunner to this journal) in August 1945. But the thin trickle of books on O & M published in the 1940s has, by mid-'seventies, swollen to a flood of texts on all aspects of management and I have been asked to try to chart a passage, both for the line manager and for the specialist, through the welter of published information.

Three important, but dissimilar, guides to management literature have recently appeared. It may be of some interest to mention them. The briefest is the British Institute of Management's *Sources of Management Information* (1975; £1.25 to BIM collective subscribers, £2.50 to

non-BIM members; 34 pages). The sources of information are grouped under nine broad subject headings—among them, Defining the Search, Books, Periodical Literature, Research in Progress, Reference Books, Management Courses and Training Materials. It concentrates on British material and attempts to include 'key' sources of information. (It is a companion to the BIM's *Basic Library of Management* published in 1974.) In contrast Georges Sandeau's *Selective Management Bibliography* contains references to over 7,000 books and articles published in English, French and German, the majority since 1970. (1975, Bowker, £12.50, 402 pages.) Full reference details are given for all items and an English translation of French and German titles. This major bibliography is arranged according to the *London Classification of Business Studies*, which since its publication in 1970 has become the accepted framework for the arrangement of management literature. Its author, Ken Vernon (Librarian of the London Business School), has recently edited an authoritative guide to the *Use of Management and Business Literature* (Butterworths, 1975, £9, 327 pages), which is intended primarily as a guide for the individual manager who needs to find information and to understand the theories and ideas which can be applied to business problems. Among the contents are subject surveys of the literature of corporate finance and management accounting by Anthony Hopwood, organizational behaviour by John Child, manpower management and industrial relations by Ray Loveridge and Stuart Timperley, quantitative methods by Howard Thomas. It also discusses the techniques of information retrieval in management and suggests some reference sources. (Incidentally, have you spotted the fact that the well-known *Anbar Management Services* abstracts now include an instant index at the back of each part and can, therefore, be used to retrieve information, as well as for 'current awareness'?)

As well as finding his way through a bibliographic jungle, the manager has to survive in an increasingly complex and jargon-obsessed society. *A Handbook of Management*, edited by Thomas Kempner, published in hardback in 1971 and now available in a revised edition as a Penguin, is a convenient and cheap vade-mecum. The main part of the book, in dictionary format, gives concise explanations with diagrams and tables of many concepts and ideas which underpin the work of management. A synoptic index directs readers to a more detailed view of topics and their major links (1976, Penguin, £1, 428 pages). Another useful directory is the *Accountant's Guide to Management Techniques*, edited by Stanley Oliver (Gower Press, 1975, £7.50, 586 pages). Although written specifically for the accountant, it offers expositions which may be generally useful of many of the principles and techniques of modern management—such as those of MS, marketing, personnel administration, communications, as well as of general and financial management. Each section contains a short reading list.

A major new treatment. A definitive text. A comprehensive manual. These were phrases used to describe *Work Measurement* by Dennis

Whitmore (Heinemann, 1975, £5.50 paperback, 435 pages), written at the invitation of the Work Measurement Textbook Committee of the Institute of Practitioners in Work Study, Organization and Methods. There is a detailed bibliography and an index. It is intended both as a student's text and as a manual of current practice for the experienced practitioner. The reader of *O & M and Management Services* by J. C. Denyer (Macdonald & Evans, 1976, £3.75 paperback, 336 pages) is assumed to have a basic knowledge of office machines and systems. The book does, however, contain useful O & M checklists, case studies and a list of British Standards on items relevant to office management.

A further title in the Management Services Handbook series prepared by CSD's Management Services (General) Division has recently been published: *Microcopying systems* (E.134, 1976, £1.30, 55 pages). The aim of the handbook is to assist Management Services officers in Government Departments in assignments where they have to consider the use of microcopying techniques as a solution to problems involving documentation and information retrieval.

A 'systems' approach to the use of microcopying is essential in assignments involving these techniques and has been a feature of microcopying applications in the United Kingdom and particularly in the Civil Service context. *Microcopying systems* is the outcome of lessons learned during these formative years and represents some of the combined experience of MS(G) Division and the Central Computer Agency of CSD, and the Co-ordinator of Reprographic Services of Her Majesty's Stationery Office. The topics covered include: technology and hardware; selection of the microform; COM; processing and preparation for use; storage; the economics of microcopying; and ergonomic and behavioural factors.

Government Departments may obtain copies of *Microcopying systems* through their normal publication demand procedures; outside organizations may obtain copies from the Civil Service Department (MSISS), Whitehall, London SW1A 2AZ. Orders must be accompanied by a cheque or postal order, made payable to 'Civil Service Department'.

'A strategy for the acquisition, utilization, improvement and retention of an enterprise's human resources.' *Practical Manpower Planning* by John Bramham (published by the Institute of Personnel Management) is a general guide with simple, practical ideas for anyone wishing to know more about the techniques whose definition by the Department of Employment heads this paragraph. Manpower planning has often been seen as a primarily statistical problem; this booklet emphasizes the importance of the human element. (1975, IPM, £1.50, 198 pages.)

These books are on display in the CSD Central Management Library for the two weeks following publication of this journal. Thereafter they may be inspected by staff in Departments at any time, but a preliminary telephone call is recommended (01-273 5788) to ensure that the titles you are seeking will be available at the time of your visit. The books are not available for direct loan from the CSD library.

Letters to the Editor

The views expressed in *Letters to the Editor* are the writer's own, and not necessarily those of his Department.

The Project is Dead! Long Live the Project!

Dear Editor,
Derrick Croisdale's stirring article in the February 1976 edition calling for people combining computing and management skills with 'an advanced education in sociological, organizational and technological subjects' may herald the Civil Service equivalent of a Great Leap Forward. I can lay no claim to match up to this Olympian specification, but as a psychologist who, from time to time, uses on-line processing to help solve systems/organizational problems, I may have enough experience of this type of task to foretell some of the difficulties in providing a systems approach to management and experimenting with small-systems changes which are waiting the other side of the fence. They may be tabulated thus:

(*a*) *Blank incomprehension and chronic paralysis.* The Civil Service tradition of favouring literacy to numeracy has meant that it has become an acceptable convention to shelve problems which cannot be solved by verbal analysis or social devices like meetings. Civil Service managers are used to systems analyses of a sort: they generally take the form 'we cannot do that because that would involve X4 Division and we do not want them round our necks' or 'if we say that it will become X4's responsibility and get it off our patch'. Another version, lower down the scale, is experienced by most civil servants on first encountering procedures which clearly offend good sense and are palpably inefficient but which cannot possibly be changed: this involves a recognition that change in one part of a system often demands reciprocal change in another 'and that would involve X4 . . .', etc. The analyst will land right in the middle of this simply because those problems which can be solved within a unit or division usually are, and only those which cannot will be referred. In other words she/he will find himself with only the intractable problems which cut across a number of 'interests' (advisers to industry say that most of the so-called 'technical' problems turn out to be managerial) and he will either end up lamenting the lack of facilities for banging Assistant Secretaries' heads together, or doing so himself (a hazardous pastime).

(*b*) *Lack of managerial time.* Civil Service managers do not *seem* to have sufficient time to tackle long-term issues in depth. This may be merely the result of (*a*), i.e. they take so long to solve trivial problems that they fill up the day, but it is more likely to be because of the very short time between interruptions as they have to dash from meeting to meeting, file to file, on the ring of a telephone. In this way they spend more time thrashing between problems than actually solving them and end up literally too busy to do anything. The analyst will not get a look in.

(*c*) *Small system changes might create 'anomalies'.* Precedents and notions of consistency are held in such high regard in the Civil Service and 'inconsistencies' are so dreaded, that managers actually prefer operating through monolithic 'policy statements' designed, hopefully, to cater for every conceivable contingency. But this kind of procedure requires a much higher level of managerial confidence and is, therefore, slower than small systems experiments, because the risks are much

higher. Moreover, analysis of large systems seldom engenders confidence because it generally lays bare, or even questions, previously covert assumptions. This again inhibits change: 'when you come to look at it, it is really much more complicated than we first thought. Perhaps if X4 Division . . . '.

(*d*) *Paranoia/suspicion.* These will arise for two reasons: first, because the analyst will have access to information and should acquire understanding of procedures which have remained hidden for some time and any suggestion for change is liable to be interpreted as criticism, not necessarily by those he deals with face-to-face but by people down the line. Change brings disadvantages which are organizationally weighed against the intended gains but they do not necessarily balance in the same people: additional benefits for prisoners may mean more work for staff. Second, suspicion will arise, perhaps curiously for those who are unfamiliar with the notion that competence is often regarded as being organizationally subversive, because the analyst will do work other than paperwork. For instance, in order to maximize the undervalued insightful learning which comes from trying to get a computer to mimic a system, the analyst will have to write and run his own programs. Most people at an equivalent level will have no counterpart to this and may imply that he is wasting his time, or being incompetent, spending an afternoon de-bugging a program. A staff inspector once suggested that my job was overgraded because I type at a computer terminal myself: I think I was meant to stand behind an operator and give instructions and my, perhaps unhelpful, response was to ask if his efficiency would be improved if a telephonist was responsible for working his telephone.

(*e*) *Organizational isolation.* The Civil Service is organizationally geared to routinely crunching its way through an enormous amount of work and the analyst will have all the problems of working non-routinely within it. This will mean that his job specification will be vague and his role ill-defined so the basis on which work is referred is uncertain. He will thus have a fluctuating workload and may find himself, on occasions, with less work than his routine colleagues—time which he may spend catching up on his homework and reading journals. Even if he can convince the ever-increasing numbers of O and M staff, his colleagues will mutter 'I never know what he does', 'he seems to do just what he likes' and 'I would not mind being paid that money just to sit and read'. Often people in this position feel pressurized into taking on a completely wasteful routine job just to maintain face-validity, credibility and organizational integration: others set up a so-called 'service department' and are lost for ever.

None of this, of course, detracts from Derrick Croisdale's argument, but it does suggest that two further qualifications are required for the job—that she/he should have an indefatigable ability to remain unimpressed by procedures 'hallowed by time' *and* to manifest this by a recidivist tendency to heresy. But, as any systems analyst knows, further constraints reduce still further the chance of meeting the specification. Oh dear, how difficult it all is: nothing can be done. . . .

Yours sincerely,

HUGH MARRIAGE
Home Office Prison Department

Management in Government

Dear Sir,
In your May 1975 issue you published a most interesting and challenging article by

Mr. R. W. L. Wilding on a subject which is obviously relevant and important to the effective and efficient conduct of a very wide range of Government business. The article was also highly relevant to the development of the competence of Government Departments and Agencies, and to the promotion of job satisfaction and good morale among civil servants, both of which appear to be desirable aims in themselves, and even more so in times of national economic difficulty when civil servants tend to become the target for much unfair criticism from various sources—often ill-informed.

In my letter published in the August 1975 issue I suggested that few civil servants would dispute Mr. Wilding's analysis and his broad conclusions on a right and sensible course to follow. These conclusions implied the *need for action*, i.e. efforts to promote active study and research by and within the Civil Service to develop its own approach to good management. I offered several further suggestions, the main point of which was to stress the obvious need for central direction through an appropriate agency, and with a suitable forum. Is not the Civil Service Department Management Services unit the obvious central agency for this purpose, with the collaboration of the Civil Service College? Should there not be a standing inter-departmental steering committee, constituted at an appropriate senior officer level, but chaired and serviced by CSD(MS), to direct and control such study, research and development?

To some extent this quarterly journal *Management Services in Government* could serve as a medium for exchange of views and experience and for reporting progress. There seems, however, to be a need for a *live forum* for periodical discussion, perhaps two or three times a year. Could not CSD Management Services plan and organize this, on the basis of having secured the appointment of a 'Development of Management in Government' liaison officer (at an appropriate level) in all the main Departments and Agencies?

I recognize that implementation of these suggestions would probably require a prior mandate or 'charter' for Management Services Units in the CSD (and other Departments) based upon a more positive and up-to-date allocation of functions to these Units, and a more enlightened and up-to-date appreciation of what 'Management Services' in the Civil Service is and should be, what it is for and what is expected of MS personnel. Hopefully, this would include recognition of the need for not only suitable staff complements in numbers and grades, but also the right mix of relevant disciplines and skills, with greater emphasis on an inter-disciplinary approach to management advisory and development work.

In conclusion, may I draw attention again to the book *Management in Government** written by Desmond Keeling (an Under Secretary in the Civil Service) for the Royal Institute of Public Administration? By any standards this constituted a masterly and up-to-date survey and analysis of the subject by an author well qualified for the task. Could not some of his main conclusions concerning the scope for change and improvement in the practice of good management in the Civil Service be used to serve as a starting point for constructive and systematic discussion and development, at the instigation of CSD Management Services, perhaps adopting a new and structured approach on the lines suggested above?

Yours faithfully,

T. FARMER
Department of the Environment

* *Management in Government* by Desmond Keeling. Published by George Allen & Unwin Ltd.

Printed in England for Her Majesty's Stationery Office
by The Campfield Press, St. Albans